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MEDICAL ANNALS

of the

DISTRICT OF COLUMBIA

Official Publication of
THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

VOLUME XIII

1944

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MEDICAL ANNALS
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VOLUME XIII January, 1944 NUMBER 1

FRONTIERS OF MULTIPLE SCLEROSIS*†

I. Pneumoencephalography, Electroencephalography, Morbid Anatomy and Pathogenesis

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Introduction

Multiple sclerosis is a common disorder of the central nervous system, of which much has been written concerning etiology, pathology, clinical manifestations, treatment and other aspects, but there is hardly any disease as common as this in which there are so many unanswered questions.

The present contribution to the natural history of the disease is not in the nature of a review, and few citations from the literature will be made, since they are not particularly relevant. It jumps off from the known into the relatively unknown, hence the "Frontiers" part of the title. The work is divided into four sections for the convenience of systematic discussion; it would require many additional sections to envisage all the "frontiers" of multiple sclerosis that have not been touched upon. The particular frontiers that I have chosen to investigate are:

1. Pneumoencephalography
2. Electroencephalography
3. Morbid Anatomy and Pathogenesis
4. Fever Therapy, Prolonged Rest and Climatotherapy.

Pneumoencephalography

My interest in the pneumoencephalogram in multiple sclerosis stems from a case in which there were such marked clinical manifestations of psychic disorder that a neoplasm of the frontal lobes was suspected. The air study not only ruled out this possibility but also yielded such important evidence of an atrophic lesion that further studies with this method were pursued in 12 other cases.

I have been able to find but 2 references to air studies, one by Koschevnikov and Fraenkel[1] based upon a single case; and one by Vercelli[2] based upon 8 cases. The former authors reported changes that were not verified by necropsy, namely, unequally dilated ventricles and pockets of air over the cortex. They mentioned the fact that in other less pronounced cases the ventricular reaction was milder. Vercelli also reported in some of his cases unequal dilatation of the ventricles and focal collections of air over the cortex, especially in the region of the insula, but earlier cases showed little or no change. This author was inclined to believe that intracranial hypertension and hypersecretion of cerebrospinal fluid were responsible for the disease.* It seems particularly remarkable that various authors who have reviewed rather thoroughly the subject of multiple sclerosis should have neglected this interesting aspect of the disease. No mention of encephalographic studies appears in the textbooks, the handbooks, or the critical reviews of the past 20 years. My studies seem to shed new light upon the disease, and I have been able to verify the findings in 3 of the 13 cases at necropsy.

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* From the Department of Neurology, George Washington University School of Medicine.

† Abridgment of the Davidson Lecture, presented before the Society, October 13, 1943. This monograph will be published in two parts, of which this is Part I.

The chief reason for this neglect, I believe, resides in the fact that the various investigators have focused their attention at too low a level of the neuraxis. They have begun with Charcot's triad of nystagmus, scanning speech and intention tremor, and from the pathologic standpoint have been interested chiefly in the alterations of the cerebellum, brain stem and spinal cord. It has long been known, of course, that one of the favorite sites of the plaques of the disease is in the neighborhood of the ventricles, especially around the anterior horns. Gross atrophy of the cerebral hemispheres, however, has seldom been noted, and there is nothing in the pathology of multiple sclerosis that is at all reminiscent of Alzheimer's or Pick's disease. The pneumoencephalogram, however, is able to pick out discrete focal atrophies that may well explain some of the clinical manifestations of the disease, even if the brain at the time of necropsy is not notably altered from the normal.

The Pneumoencephalogram. Probably the most striking feature of the pneumoencephalogram in multiple sclerosis is the variation from case to case. Almost all of the cases show some dilatation of the ventricles, mostly in the frontal regions, and often asymmetrically (fig. 1). Furthermore, there is sometimes flattening of the contour of the head of the caudate nucleus without the rounding of the anterior horn as seen in internal hydrocephalus either from blocking of the fluid pathways or from lobar atrophy as seen as seen in senile or presenile dementia. There are no focal "wanderings" of the ventricles seen

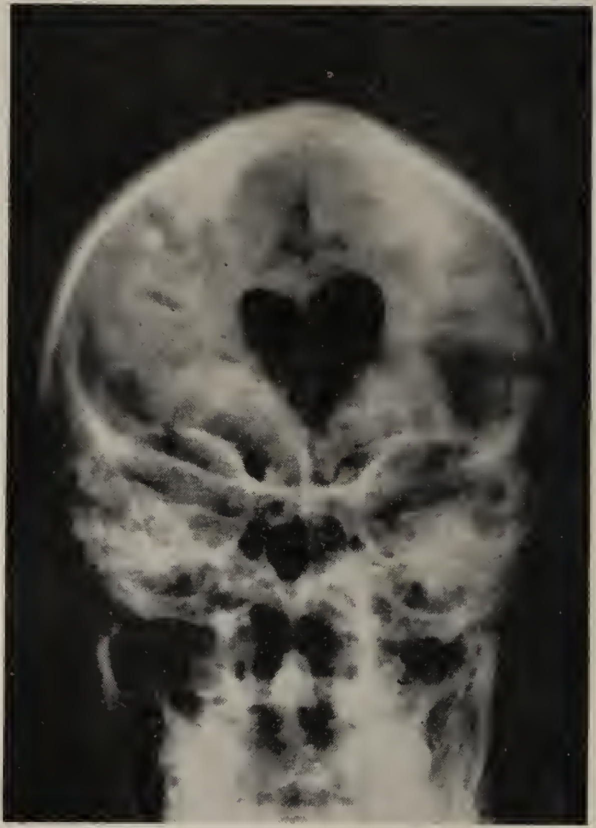

Fig. 1. Case 2. Frontal encephalogram showing considerable dilatation of the anterior horns of the ventricles, especially on the right. A large air shadow occupies the sylvian fissure and outlines the insula on the right. There is a stellate shadow in the midline, and enlargement of the supracortical air shadows over the frontal poles. The third ventricle is dilated.

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* I mention this theory as an indication of the muddled thinking and absurd conclusions that characterize so many of the "contributions" to the study of multiple sclerosis. In the larger view, however, the same could be said of almost any other disease in the era before its etiology was established.

so often in traumatic atrophies. The occipital and temporal horns are sometimes asymmetrically dilated.

The air over the cortex is increased in nearly all but the early cases. This is particularly true in the region of the sylvian fissure and over the insula, and resembles in some degree the encephalographic findings in general paresis as studied by Ebaugh, Kiene and Dixon.[3] Collections of air are also found beneath the frontal and temporal poles. However, in addition, the air-filled spaces are much more apt to be focal in character, and they occur as stellate shadows or radiating lines not only in the areas mentioned but also over the central convolutions of some cases and in some cases on the mesial aspect of the hemispheres. These focal and disseminated collections of subarachnoid air are the most characteristic finding in the encephalogram of multiple sclerosis and may prove to be a diagnostic point in the so-called negative encephalogram when it is used merely to exclude tumor.

Air in the posterior fossa is often increased, sometimes to the extent seen in cases of intrinsic cerebellar atrophy. The fourth ventricle may be considerably dilated, and the folia of the cerebellum may stand out with great prominence. The basal cisterns may appear larger than normal, and the visualization of the pons may be very definite, that structure appearing quite small in comparison with the normal.

There are some cases in which, in spite of clinical manifestations indicating severe disability and a long history of exacerbations and remissions, little or no alteration is evident in the encephalogram. In such cases it is probable that the localization of the disease process is rather limited to the brain stem and spinal cord.

The progressive character of multiple sclerosis is illustrated by the case of a young girl who has undergone encephalography on 2 occasions more than 3 years apart. The first examination was substantially negative, the ventricles being small and symmetrical, although the third ventricle was somewhat wider than would be anticipated in an adolescent. However, the second encephalogram, made in 1943, revealed ventricular dilatation with the characteristic flattening in the region of the head of the caudate nucleus, together with marked dilatation of the third ventricle, which appeared as a lozenge-shaped shadow in the midline about 11 mm. across. There was only a small amount of air in the subarachnoid spaces.

The correlation between the encephalographic findings and the clinical condition is moderately close. In those cases that show marked ventricular enlargement, especially in the anterior horns, there is apt to be a considerable degree of euphoria, occasionally with exuberance and overactivity. Patients with dilatation of the third ventricle, as in the case noted above, are characterized by lethargy or sometimes by an extreme degree of emotional instability. Large shadows in the posterior fossa are accompanied by very marked ataxia, while those cases that show little deviation from normal in the encephalogram are either early cases or are suffering from lesions predominantly of the brain stem and spinal cord. I have not noted any special features in those cases showing large collections of air over the central convolutions.

Correlation of the encephalograms with the appearance of the brain at necropsy was carried out in 3 cases. The first 2 cases were of long duration and showed quite distinctly the alterations that corresponded with the abnormal air shadows. Both brains were reduced in size, particularly about the basal regions such as the pons and cerebellum. In both cases there was considerable asymmetrical dilatation of the ventricles. While the atrophy of the hemispheres was not so striking at first glance, yet when the films and the specimens were studied together, the focal characteristics of the atrophy were very clearly shown. On the specimens it was possible to demonstrate the narrowed convolutions and the widened sulci exactly in the location where the stellate air shadows had been visualized in the roentgenograms. And it was very evident in one instance that the large shadow in the region of the sylvian fissure corresponded exactly with a major sinking in of the tissues of the insula and operculum on the right side (figs. 2 and 3).

In summary, then, it may be stated that the pneumoencephalogram in multiple sclerosis is quite variable from case to case. The chief characteristics are asymmetrical dilatation of the anterior horns, focal enlargement of the sulci over the convexity with stellate shadows appearing in unusual places such as the median longitudinal fissure. Some cases present a considerable accumulation of air beneath the frontal lobes and in the opening of the sylvian fissure and sometimes over the insula, while other cases show decided enlargement of the subarachnoid spaces over the cerebellum with clear visualization of the folia of this structure, and of the pons. The third and fourth ventricles are dilated in certain cases, but this does not occur usually in the same case.

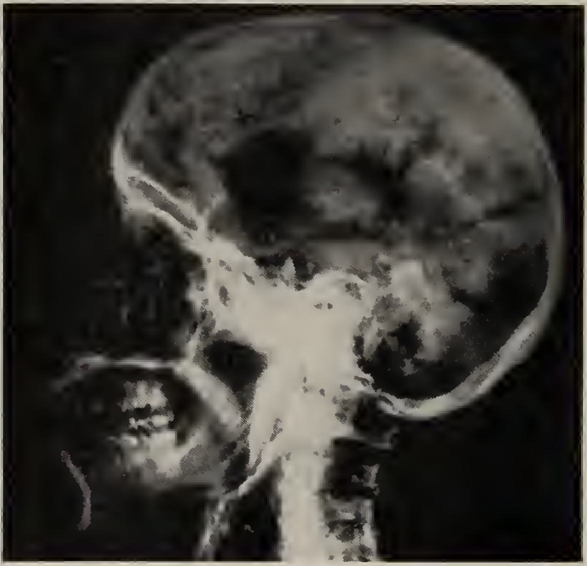

Fig. 2. Case 2. Lateral encephalogram showing a large pocket of air at the entrance to the sylvian fissure. The basal cisterns and particularly the posterior fossa are markedly dilated due to atrophy of the basal portions of the brain. Stellate and linear shadows are seen in the frontal, parietal and occipital regions.

There is a moderately high correlation of the clinical features of the disease with the encephalographic findings as shown in table 1. There is, furthermore, a very clear correlation with the progress of the disease as shown in case 8. Correlation with the findings at necropsy is also reasonably high, since the sinking in of the convolutions occurs in the precise location where the air shadows have been observed in the encephalogram. The pneumoencephalogram in multiple sclerosis has called attention to the focal atrophies of the cerebral hemispheres, and these atrophies have been verified in those cases coming to necropsy. It would seem that the encephalogram has yielded more precise information in this respect than was to be obtained from the gross examination of the brain. This is not in the least surprising,

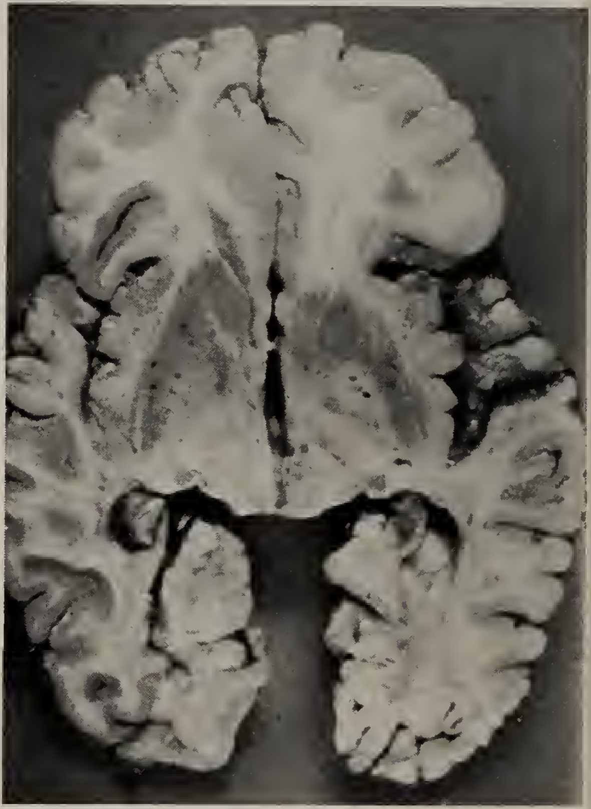

Fig. 3. Case 2. Horizontal section of brain near base showing several subcortical plaques. The insula on the right is sunken in. The right posterior horn is dilated, and irregular plaques are numerous around the ventricles. The third ventricle does not appear dilated as it does in the encephalogram (see fig. 1).

TABLE 1

Pneumoencephalographic Findings in Multiple Sclerosis

CASE NO.	ONSET	SEX	AGE AT ONSET	AGE AT TIME OF STUDY	DURATION	COMPLETE DISABILITY	CLINICAL FEATURES										APPEARANCE OF ENCEPHALOGRAM											REMARKS
							Spasticity	Ataxia	Tremors	Dysarthria	Laughing	Incontinence	Blindness	Euphoria	Emotional incontinence	Intellectual deterioration	Dilated Ventricles				Basal cisterns	Sylvian fissure	Median fissure	Frontal poles	Central fissures	Posterior fossa	Insula	
																	R	L	III	IV								
1. AW	1927	F	25	40	15	1940	++	+++	++	++	++	+++	++				+	+	+					+		+++	+	Autopsy 1942
2. SG	1925	F	19	35	16	1938	++++	+++	++		++	++++	++	++++		++	+++	++	+++	+++	+++	++	+	+		+++	+++	Autopsy 1942
3. DBy	1941	M	28	29	1	1942	+	++		+		+	+	++		++	++	+	+++						+	+	+	Autopsy 1943
4. DZ	1929	M	35	44	9	1939		+						+++	++	++	+++	+++	++		+		+	++			+	Institution
5. HF	1925	M	28	44	16	1927	++	++		+++		+		+		+	+	+	+	++	++		+	++		++		Institution
6. HS	1924	M.	12	28	16	1924	++	++	+	+	++			+			++	++	+		++		+				+	Home
7. AA	1930	F	27	39	12	1941	+	++	++	+				++	++	++	++	+	++		++	+	+	+	++	++	++	Institution
8. VB₁	1931	F	6	14	8	1939	+	++	++	+			+	+	++	+			+		+							Institution
8. VB₂	1931	F	6	17	11	1939	+	++	+++	++		+	+	++	+++	++	++	++	+++		++	+					+	Institution
9. DBₐ	1927	F	19	27	8	1935	+++	+++	+++					+	++	+							+	+++	+	+	++	Home
10. ED	1937	F	28	33	5	1940	++	+			+		+	+++	++	++	++	+++	+++		++	+		++		+	++	Home
11. BK	1928	F	17	30	13	1940	++	++	+			+			+								+	++		+		Poor Filling
12. LM	1937	F	37	43	6	1943	++	++	+		+	++	+	++	++	+	+++	++	+		+	+		+		++		Died 1943; no autopsy
14. GN	1939	F	31	35	4	1940	+	+	+					++	++	+	+	+	+		+	+		+	++	+		Institution

since the encephalogram depicts the contours of the living brain encased in its firm container. After removal of the brain there is so much deformity during fixation that the minor atrophies are much less impressive.

ELECTROENCEPHALOGRAPHY

The electroencephalograph has yielded an abundance of information about various diseases of the brain. While epilepsy is the outstanding example, many diseases and particularly traumatic lesions have been recognized as presenting more or less typical wave patterns. Abnormal electroencephalograms have also been reported in a considerable number of mental disorders of the so-called functional type, although there is a good deal of confusion as to what constitutes the defect, and also what tracings can be correlated with what disorders. The localizing value of the EEG has repeatedly been proven in gross lesions of the brain such as scars and tumors, more particularly when these lesions involve the cortex. It was anticipated, therefore, that the EEG in multiple sclerosis would yield corroborative information for the pneumoencephalographic findings as detailed above.

Electroencephalograms have been performed upon 6 patients of this series, although only in 4 cases have both pneumographic and electrographic records been made. In case 13, however, the patient was followed to necropsy, and since the EEG was performed only a few months before death, the tracing probably reflects the terminal condition.

There are but few reports in the already voluminous literature on electroencephalography that deal with multiple sclerosis. Berger[4] mentions the results in a few cases, but finds little abnormality. Lemere[5] calls attention to the surprisingly normal rhythm in his cases of multiple sclerosis, and Gibbs and Gibbs[6] in their splendid atlas find no significant alterations. I am indebted to Dr. Robert Cohn of St. Elizabeths Hospital for his careful study of the pa tients presented in this section.

To sum up the results of this study it may be said that the electroencephalogram of multiple sclerosis is substantially normal. Only in 1 case (no. 14) did any definite abnormality appear, and in this case the abnormal tracings were recorded during an acute exacerbation of the disease. When the patient was in remission, the EEG returned to normal. Even in the case of the adolescent girl (case 8) with severe behavior disorder and genuine convulsive seizures, the EEG was substantially normal.

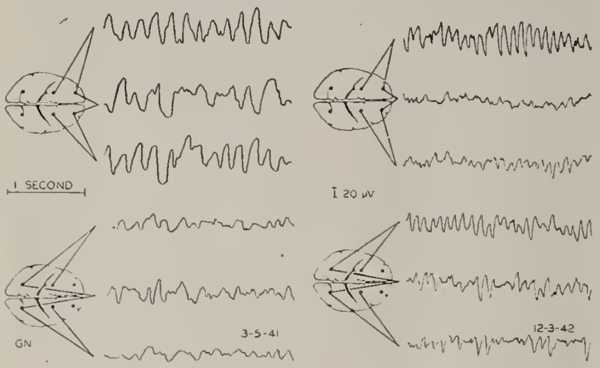

FIG. 4. Case 14. Abnormal electroencephalogram during acute phase of multiple sclerosis contrasted with a normal tracing during quiescent stage. Large amplitude 5 wave per second discharges dominated the record, especially in the frontal regions, but later disappeared.

Since the electroencephalogram is such a sensitive indicator of dysfunction of the cerebral cortex, these normal tracings must have some definite significance as regards the pathologic alteration observed in the disease. In association with the air studies, the electroencephalographic studies indicate that what is termed "cortical atrophy" on the basis of pneumoencephalography is not cortical at all but rather subcortical. The stellate shadows and the dilated sulci found by roentgenography, therefore, are evidently due to sinking in of the unharmed cortex by virtue of the cicatricial contraction of the subcortical white matter.

In case 14 a grossly abnormal EEG was obtained during the height of an active phase of the neurologic disorder. A subsequent EEG while the patient was in remission showed an unusual distribution and amplitude of the primary rhythmic potentials, but no obvious slow-wave activity (fig. 4). The remaining 5 subjects, who were in a state of remission or gradual decline, generated EEG's that were well within the range of normal variation. That these results should be obtained in the presence of demonstrable pneumographic evidence of scattered cortical "atrophies" of variable size, and of important objective neurologic and especially psychologic findings, is probably to be explained by the subcortical localization of the lesions of multiple sclerosis. This is in good agreement with the experimental work of Dusser de Barenne and McCulloch[7] which indicates that rhythmic brain activity arises in the cortical neurones.

In view of the marked "cortical" atrophy seen in the pneumoencephalogram in case 7 it was anticipated that abnormal wave patterns would appear at least in this area, but their absence seems to indicate either that the cellular constellations are continuing their activity unhampered by the loss of myelin sheaths in the subjacent tissue, or that "dead cells, like dead men, do not talk." A third alternative, that the atrophic focus is too small to give rise to abnormal electric impulses is scarcely tenable, since positive electroencephalographic evidence of cortical dysrhythmia is very evident in certain cases of focal lesions that are considerably smaller than the large patch of subarachnoid air would seem to indicate in this case.

MORBID ANATOMY AND PATHOGENESIS AND THEIR BEARING UPON ETIOLOGY AND TREATMENT

The morbid anatomy of multiple sclerosis has been progressively clarified over the period of a century. Selective stains have shown that the characteristic plaques are areas where the myelin sheaths have been destroyed, with later replacement by glia fibrils, but there are several intermediate steps in the process that serve to elucidate the pathogenesis and throw some light upon the etiology.

The earliest indication of the formation of a new plaque is localized pallor from solution of myelin. Examination under high power reveals fragmentation, swelling and tortuosity of the sheaths in this area. Even before much reaction has occurred upon the part of the inflammatory cells there is apt to be a deposit of fat globules in the tissue. Sometimes this occurs in the immediate vicinity of a blood vessel, but not all plaques show any such clear relationship. In any event, the destruction of myelin is followed shortly by exudation of lymphocytes and mononuclear elements, the latter being engaged particularly in the phagocytosis of fat. A well developed plaque, then, shows myelin loss up to the boundary, with a more or less massive cellular exudation and infiltration around the periphery, and a plentiful deposit of fat-filled histiocytes close behind (fig. 5). As the plaque grows in size and in age its central portion becomes more and more sclerosed by the reaction of the astrocytes and the formation of a dense felt-work of glia fibers, the infiltrating cells and the wandering phagocytic cells disappear, and finally, except for a few dilated perivascular spaces and an occasional fat droplet, the plaque presents a completely inactive appearance.

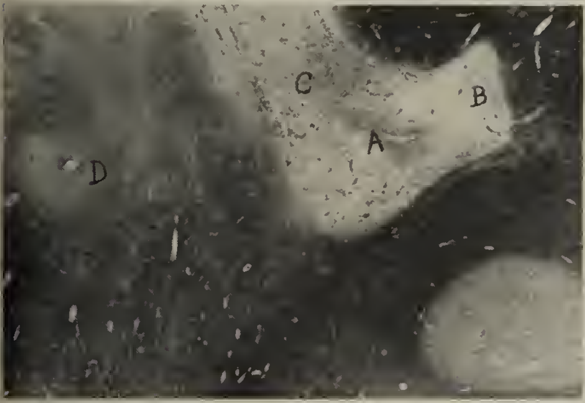

FIG. 5. Case 1. Subcortical plaque stained for fat. The myelin stains somewhat with Sudan III, but the fat is bright scarlet, showing as minute black spots in the photograph. The center of the focus, A, is around a blood vessel and is devoid of fat and obviously old and sclerotic. At B the plaque is extending, the myelin destruction (pallor) advancing ahead of the zone of fat-filled phagocytic cells. Note that the plaque is advancing evenly and not along the course of a small vessel. At C the plaque is maturing and there is an abundance of fat. To the left at D is an inactive plaque surrounding a blood vessel.

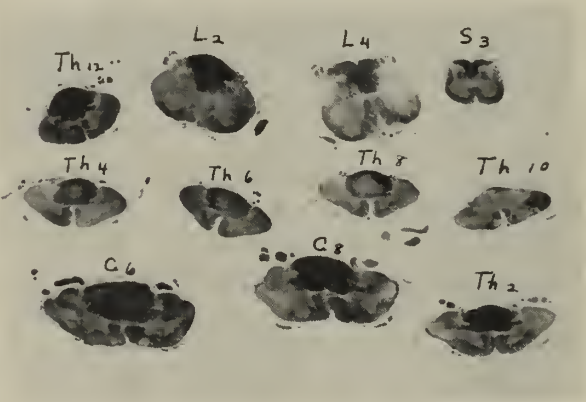

FIG. 6. Case 2. Spinal cord, myelin sheath stain. The approximate levels are indicated. There is relative integrity of the internal architecture of the spinal cord in spite of general shrinkage. The plaques are shown as pale areas of irregular shape involving both gray and white matter. They vary in location at various levels of the spinal cord. Th 12 is practically normal, while two segments higher up the plaque covers three fourths of the cross section.

The absence of secondary degeneration is revealed by the fact that although both dorsal columns are completely demyelinated at Th 10, they are almost intact at Th 6 and above. Furthermore, the lateral pyramidal tracts are severely degenerated at Th 2 but normal at Th 6, degenerated again at Th 8, normal at Th 12, completely degenerated at L 5 and only slightly at S 3. The conclusion is presented that the destruction of the myelin sheath is discontinuous, and that as long as the axone persists the fiber is viable. Multiple interruptions of the myelin sheath, like removal of the insulating material from a wire, prevent the proper conduction of nerve impulses. Hence, even though the axone is intact, and its cell of origin unharmed, function is impaired or lost. The patient in this case presented an extreme degree of spasticity and anesthesia to all modalities of sensibility. Huge pressure sores were painless, and there were extreme contractures of all 4 limbs.

The nerve fibers themselves do not suffer to the same extent as their myelin sheaths. Except in the most severe necrotic type of plaques to be described presently they remain in place, although an early plaque may show some enlarged bulbous endings due to retraction of the two ends of the ruptured fiber. Even in the oldest plaques there remain numerous axones altogether devoid of their myelin sheaths. Indeed, under certain circumstances, as for instance at the edge of a plaque in the spinal cord, it is possible to observe a single nerve fiber enter a sclerotic patch, lose its myelin sheath for a short distance, and come out on the other side of the plaque with its myelin sheath intact. Secondary (Wallerian) degeneration occurs apparently only when the axone itself is interrupted, and consequently is relatively uncommon in multiple sclerosis (fig. 6).

Necrotic plaques differ from those usually seen in the fact that in the early stages there is intense infiltration with actual degeneration and softening of the tissue and a certain amount of reaction on the part of the perivascular connective tissue. Such plaques have a cribriform appearance, and study of the trabeculae discloses the intermingling of axones and glia fibers, with here and there an additional element of reticulum derived from the adventitia of the small vessels. The mesodermal tissue, however, disappears as the plaque ages, and as in all brain scars only traces of it remain in the bed of glia fibers. Necrotic plaques are seldom seen in the spinal cord or brain stem. They are particularly common around the horns of the lateral ventricles, and the general shrinkage of the tissue tends to reduce the size of the necrotic foci with progressive enlargement of the ventricular cavities.

It has been said that multiple sclerosis is no respecter of anatomy. Unlike the so-called system diseases where the degenerations are limited to certain tracts in the spinal cord, the lesions of multiple sclerosis overstep the anatomic boundaries of gray and white matter in the spinal cord and brain-stem (fig. 7). Moreover, in the thalamus and basal ganglia where there is a rather intimate admixture of gray and white matter, the plaques are seen to develop with little influence upon their form from the location of heavy bundles of fibers in the neighborhood. Conditions are different, however, where the cerebral cortex is concerned. Plaques are frequently found in the white matter immediately beneath the cortex. Here they are apt to be quite elongated, extending up in the narrow brush-like sweep of fibers and spreading

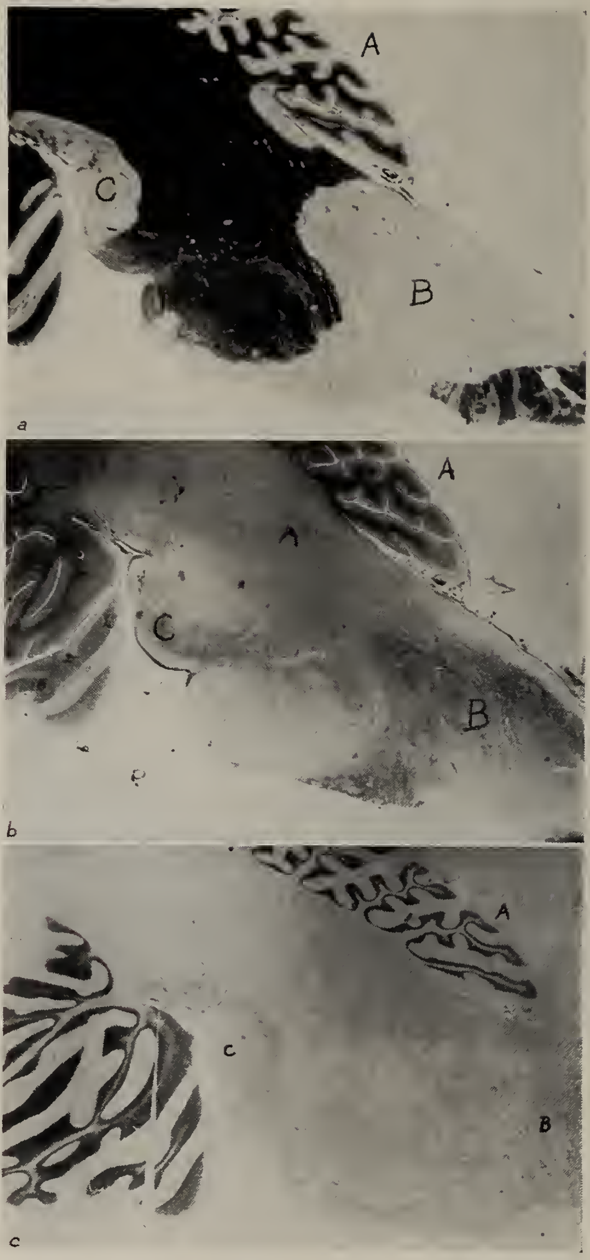

FIG. 7. Case 3. Parasagittal section of brain stem and cerebellar vermis revealing the characteristics of plaques of different ages by means of selective stains.

a. Myelin sheath stain. The plaques are outlined very distinctly by the myelin loss. Plaque A involves the dorsal aspect of the pons and the base of the adjacent cerebellar folia. Plaque B involves the whole thickness of the pons. Plaque C involves the ventrolateral portion of the pons close to the lateral recess of the fourth ventricle. This stain shows only the location and shape of the plaque but gives no information concerning its age.

b. Glia fiber stain (Holzer). The glia fibers are dark. In out immediately beneath the convexity of the convolution. They stop short at the cortico-medullary boundary, however, and only seldom cause any considerable reaction in the gray cortex. A moderate number of fibrous astrocytes may be found in the cortex overlying the diseased area, but apparently this represents stimulation by diffusion of waste products rather than actual involvement in the plaque itself. There is no fat release and no inflammation, and finally no replacement gliosis. The cortical architecture is preserved as far as cells are concerned, and even the tangential myelinated fibers may be retained although the radial fibers are lost more often than not. There is no significant cellular infiltration of the overlying meninges.

In the vicinity of the ventricles where the most marked lesions occur, the gray matter of the caudate nucleus is also spared, and in the thalamus and hypothalamus the nerve cells and nerve fibers are apt to be preserved to an unexpected degree in view of the extensive loss of myelin. The ependyma is present in most locations, although it tends to be desquamated at the angles of the ventricles especially when necrotic plaques underlie it.

Study of the morbid anatomy of multiple sclerosis leads to the conclusion that there is a noxious agent concerned in the formation of the plaques. This would necessarily have to be a particulate agent, since it produces disseminated lesions. Furthermore, it would seem to remain within the lesion, being kept in check by unknown forces. Under advantageous conditions it can overcome the local tissue resistance and extend again peripherally to produce an enlargement of the plaque. It does this at one sector rather than all about the periphery, hence the irregular and confluent picture manifested by most of the larger plaques. Many of the smaller ones are completely extinguished to judge from the appearance of the sclerosis exactly replacing the area of myelin loss, but for every healed plaque there are apt to be several that show indications of advance. The balance between the noxious agent and the tissue resistance would seem to be delicate and readily overturned.

The etiology of multiple sclerosis is unknown. None of the experimental animals thus far used has shown a susceptibility to the disease. Symptoms of nervous disorder in animals subsequent to inoculation with material from human cases of multiple sclerosis have occasionally occurred, but further effort at transmission has been unsuccessful, and the lesions are different in the affected animals. Nevertheless, it is worth noting that in occasional instances the disease has developed in laboratory workers, pointing to the infectious etiology of multiple sclerosis.

Theories hinging upon the supposed demonstration of lead, arsenic, other metals, organic chemical compounds, and so on are unsatisfactory, and the finding of increased myelinolytic compounds in the blood serum of active cases of multiple sclerosis does not serve to explain how those substances got there. Bacteria have been incriminated from time to time, but without much in the way of substantiation, and the work of Chevassut[8] upon *Spherula insularis* has been discredited. Steiner[9] has described a spirochete that tends to break up into minute fragments, but there has been little confirmation of this work.

Pending the accomplishment of transmitting genuine multiple sclerosis and then fulfilling Koch's postulates, the etiology of multiple sclerosis remains obscure.

There are bits of collateral evidence that point

plaque A there is marked gliosis of the white matter in the base of the cerebellar folia almost exactly corresponding with the area of myelin loss. In plaque B the gliosis is extensive but not as marked, whereas in plaque C there is no gliosis. This stain, then, reveals the ancient plaques.

c. Cell stain. Plaque A does not show up at this low magnification. Its activity is practically extinguished. Plaque B shows a varying degree of activity. In its center there is no cellular reaction, while about the base it is evidently lighting up into new activity. Plaque C is a very active fresh plaque with sharp outlines corresponding to myelin destruction. The darkened areas are due to accumulations of cells both at the periphery and around the vessels. Note the absence of reaction in the meninges and in the ependyma. This stain, then, reveals fresh plaques, and the borders of extension of old ones.

to an infectious etiology of the filtrable virus type. Various eruptive fevers, especially measles, smallpox, varicella, and sometimes scarlatina and mumps are occasionally though rarely followed by inflammation of the white matter that is usually of disseminated character, often perivenous, and that leads to more or less severe gliosis. Protective inoculation against smallpox and rabies has also been followed by an acute encephalomyelitis with a high mortality in the small percentage of cases affected. These encephalitides very rarely go on to the production of either the clinical syndrome or show the lesions of multiple sclerosis. On the other hand, an outbreak of measles or other childhood malady in the family of a patient with multiple sclerosis may be the signal for a lighting up of the disease such as occurred in case 4.

Probably most important from the standpoint of a living agent as the etiologic factor is the lighting up of the dormant disease process in response to anything that reduces the resistance of the host. An ordinary coryza, a digestive upset, undue fatigue, a severe emotional crisis, or anything out of the ordinary in the lives of these patients may be the signal for renewal of the advance of the disorder. Pregnancy and parturition may bring on a relapse, and even, as was noted above, the occurrence of some acute contagious disease in the family may evoke a specific response in the diseased person. Fever from whatever cause, including therapeutic fever, may precipitate a relapse and in case 1 there may well have been some connection between the performance of encephalography and the breaking out some 10 days later of an acute multiple sclerosis that overwhelmed the body's defenses and led to death in a period of 4 days.

Although the treatment of multiple sclerosis is considered in detail in the next section, it seems only fair to state here that since we do not know the etiologic agent and have no specific remedy against it, the principles of treatment consist in building up the body defenses so that extension of the disease process will not occur. Such treatment is sometimes long and tedious, but the results are often more satisfactory than would be indicated by the textbooks.

Find influenza virus A is one of causes of present epidemic. Influenza virus type A is one of the causes of the present epidemic of respiratory disease, Jonas E. Salk, M.D., Wilbur J. Menke, M.D., and Thomas Francis, Jr., M.D., Ann Arbor, Mich., report in *The Journal of the American Medical Association* for January 8. Their investigations showed, however, that a definite proportion of the illnesses involved in the outbreak they studied was not due to influenza A or B.

"Under the direction of the Influenza Commission of the Board for the Investigation and Control of Influenza and Other Epidemic Diseases in the United States Army," the three men explain, "observation posts have been set up in various parts of the country for early detection of influenza in Army personnel.

"In the Virus Laboratory of the University of Michigan School of Public Health, such observations have been carried out for more than a year. On May 28, 1943 in the course of one of many routine surveys, several patients ill with influenza were seen at the Station Hospital, Fort Custer, Michigan. A strain of influenza virus, type A (Weiss), was isolated from the throat washings of 1 of these men, and in 2 other cases positive serologic evidence of type A infection was obtained. Since no epidemic prevalence of influenza or other respiratory disease was noted at that time and the usual seasonal decline followed, it appeared that type A influenza virus could be the cause of sporadic disease.

"From the middle of October 1943 the Army Specialized Training Program Unit at the University of Michigan was under constant detailed observation for respiratory disease. On Nov. 17 and 18, 1943 several cases resembling mild influenza appeared at sick call. On November 18 throat washings from 4 of these were inoculated intranasally into ferrets and mice. . . ."

The investigation showed that 2 of the patients had influenza virus type A, while the other 2, with clinically similar illnesses, failed to yield any evidence of the presence of influenza A or B.

"The present report," the three physicians say, "serves to detail the detection of influenza virus type A, at the onset of an epidemic in a Middle Western post before the disease was known to be present in other parts of the country."

CANICOLA FEVER (LEPTOSPIROSIS CANICOLA)*

Report of a Human Case and Review of the Literature

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HUMAN leptospirosis is most commonly the result of infection with *L. icterohemorrhagiae*, giving rise to the so-called classical Weil's disease. Infection of man with *L. canicola* is a rarely reported occurrence. We believe that this condition occurs much more frequently than has been recognized, as does Weil's disease to which it is so closely related. It is hoped that this case report, with an appended survey of the literature, will focus attention upon this entity.

CASE REPORT

J. M., a 23-year-old colored male, in the employ of a soda water concern, entered Gallinger Municipal Hospital on July 23, 1943 with a high fever and in a markedly confused and stuporous state. Because of the patient's confused mental state on admission and his very low intelligence it was extremely difficult to obtain a reliable history. He dated the onset of his illness at about one week prior to hospital admission with cough, fever, chills and headache being quite prominent. The fever became progressively worse and delirium developed. Two mild nose bleeds occurred prior to admission. One week before admission the patient cut his foot with glass. This was untreated, but no infection occurred. Jaundice was not noted and no urinary difficulties were complained of. There was no dog in the household and the patient gave no history of having been in contact with sick dogs. The only significant findings observed at the initial examination were a temperature of 104°F., moderate dehydration, marked stupor, slight injection of the bulbar conjunctivae, marked palpebral injection, and a generalized lymphadenopathy of slight degree. A small, healing laceration on the sole of the left foot was also present. There was no icterus or nuchal rigidity.

On admission the red blood cell count was 4,140,000, the hemoglobin was 85 per cent (Sahli), and the white blood cell count was 9,400, with 70 per cent neutrophils, 14 per cent lymphocytes, 6 per cent monocytes and 10 per cent band forms. The hematologic picture varied within normal limits during his illness. Urinalysis on July 24 and August 5 revealed moderate albuminuria and cylindruria with a few leukocytes. Blood cultures on July 27 and 29, and August 9 and 19 were all reported as negative. The Kahn test was negative. The blood urea nitrogen on July 24 was 16 mg. per 100 c.c. Agglutinations against typhoid, paratyphoid, typhus and brucellosis were negative on July 27 and August 8. The spinal fluid on July 24 was under a pressure of 150 mm. H_2O, and 14 cells were present; on July 26 the pressure was 190 mm. H_2O, 60 cells were present of which 60 per cent were lymphocytes and 40 per cent neutrophiles, the sugar was slightly reduced, and the Pandy test was negative; on July 30 the cell count had fallen to 7 cells per cu. mm. The leptospira agglutinations are shown in table 1.

TABLE 1

Positive Leptospira Agglutination Titers

	AUG. 21	AUG. 25	SEPT. 7	SEPT. 12
L. icterohemorrhagiae	1:100	1:10	1:100	1:10
L. canicola.......	1:10,000	1:1,000	1:10,000	1:1,000

The patient's temperature was irregular for the first 4 days following admission, ranging from 100.8°F. to 104.8°F., rectally. On the 6th day there was a sudden fall to normal and an afebrile course was present until the tenth day of his hospital illness, when a sudden rise to 103.5°F. occurred. An irregular febrile course occurred for the next few days. The temperature then became normal for the remainder of the hospital stay. The marked stupor present at admission prevailed for approximately the length of the initial febrile period. On July 25 a moderate epistaxis occurred.

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* From the Georgetown Medical Service, Gallinger Municipal Hospital. The serologic work was done by Dr. Carl L. Larson of the National Institute of Health, Bethesda, Md.

There was progressive improvement until the second febrile course. Following this, convalescence was uninterrupted. Icterus and nuchal rigidity were not present at any time. Roentgenograms of the chest on July 26 and August 6 were reported to be normal.

When seen some time following hospital discharge, the patient was enjoying good health and had no obvious sequelae of his infection.

LEPTOSPIRA CANICOLA

In 1931 Klarenbeek and Schuffner isolated from dogs a strain of leptospira, morphologically identical with *L. icterohemorrhagiae*, but which gave a titer of 1:10,000 with its own antiserum, whereas with a serum against the classical organism its reaction was 1:25. This strain was later named *L. canicola*. That this organism occupies an independent position from *L. icterohemorrhagiae*, and is not merely a variant, has been well substantiated.[1,2] Serologically, in its action on guinea pigs, and in its failure to occur in rats it clearly differs from the latter organism.[3]

THE CANINE INFECTION

Detailed discussion concerning canicola infection in dogs can be found in the excellent papers of Meyer et al[1] and of Walch-Sorgdrager.[3] Meyer and his co-workers described two types of infection, the icteric and the hemorrhagic. Both were associated with a sudden onset, high temperature, and marked prostration, with the addition of jaundice in the first type. The nonicteric form, also known as Stuttgart disease or canine typhus, presented a profound hemorrhagic gastroenteritis in distinction to the icteric form, in which merely a catarrhal inflammation of the gastrointestinal tract was noted. The presence of any degree of icterus in canicola infection had not been reported by European investigators prior to Meyer's report.

Most of the canine infections have been a severe form of the disease with a high mortality. Many cases, however, are mild and pass unnoticed. This is borne out by the fact that in a number of the reported human cases the patients denied any illness of their pets. Also, Meyer et al, in an attempt to produce the disease experimentally in dogs, were able to induce only subclinical infections, none of the dogs exhibiting the symptoms found with the natural infection.

EPIDEMIOLOGY

Canicola fever is transmitted through the urine of infected dogs.[1,3] Walch-Sorgdrager quotes Klarenbeek and Voet as saying that leptospiruria in dogs differs from the comparable situation in rats in that the latter continue to excrete leptospira in the urine for the rest of their lives, while the former are shedders only for a limited period. Little has been written in regard to the leptospira shedder stage in dogs and humans.

The infection is perpetuated among dogs because of their habit of licking urine and intimate contact with genitalia. Meyer mentions the possibility of infection resulting from the sexual act and Klarenbeek has reported experimental leptospiral infection per vagina.[4]

The disease in man results from the intimate contact with dogs in the stage of leptospiruria, the infection following the ingestion of contaminated material. It naturally follows that those individuals who come into repeated contact with many dogs are most apt to acquire the infection. Veterinarians, pound masters, and laboratory workers would be among those subject to maximum exposure.

The existence of animal reservoirs other than dogs for *L. canicola* has not been demonstrated. Investigations in Holland[3] and San Francisco[1] failed to reveal the organism in the rat population.

GEOGRAPHICAL DISTRIBUTION OF THE INFECTION

Canine canicola infection has been found in Holland, the Netherland Indies, Federated Malay States, Madras, Denmark, Germany, Austria, Sweden, China and the United States.

As regards the canine disease in this country, Raven[5] found by serologic methods an infection rate of 28 per cent in an urban area in Pennsylvania and 38.1 per cent in a rural area in the same state, using both *L. icterohemorrhagiae* and *L. canicola* as antigens; significantly enough, the latter revealed a greater number of positive serums and higher titers. Meyer, in his series, reported 25 per cent positive agglutinations against *L. canicola* in Northern California, 9 per cent in the vicinity of New York City, and none from a few serums from the South. Greene[6] found that about 20 per cent of the dogs he tested in Southern California gave positive agglutinations against *L. canicola*.

On the basis of tabulated observations Meyer states that it has been estimated that about one quarter of the dog population of different countries show the residuals of a leptospira infection and that probably between 20 and 50 per cent temporary and permanent leptospira carriers and shedders may be anticipated. It is highly probable that a significant canine reservoir is existent in this country. Further search would probably confirm the statistics proven for other countries.

Serologic examination of 426 random serums by Greene[6] in Southern California failed to reveal any evidence of past infection among those individuals. Tiffany and Martorana[2] reported negative reactions against *L. canicola* in the serums from 59 individuals whose occupations kept them exposed to dogs. These two series have been the only attempts reported in this country toward finding the amount of human infection present.

All the reported human cases of canicola infection, with their country of origin, are listed in table 2. The total for the entire world is only 28. In view of the widespread canine infection one must be led to assume that either the danger of infection is very slight, or, what is more probable, that many cases have gone undiagnosed.

THE INFECTION IN MAN

The incubation period cannot be estimated accurately from the few reported cases, but from the close relationship between *L. canicola* and the classical organism one might assume that it is the same as for Weil's disease, or from 6 to 12 days.

The symptomatology reported is that seen also in the latter disease: abrupt onset, fever, rigors, headache, muscular pains and vomiting. There may be great prostration, and the patient may appear quite ill. Injection of the conjunctivae, quite intense, is often present. Epistaxis is not infrequent. The fever is of an irregular type, usually ranging between 102° and 104°F., and varies somewhat in length; one of Snapper's cases was febrile for 8 weeks. Following a few days of normal temperature there is a tendency for a second rise which generally lasts only for a few days. A moderate leukocytosis may be present during the acute stage of the illness.

Icterus was notably absent in the cases first reported by the European investigators. In this country, however, marked jaundice was noted by both Meyer and Bruno in their cases. Renal involvement was marked in several of the reported cases, resulting in a hemorrhagic nephritis with a fairly high azotemia.

In 4 of the 12 cases originally reported from Holland, meningeal involvement was present at some time during the illness. Snapper also mentions meningeal involvement in both of his cases, a psychosis being an associated feature in 1.

The period of acute illness varied from 8 days to 8 weeks. The disease does not always present severe symptoms; in the 12 cases mentioned by Walch-Sorgdrager some very mild ones were present. Subclinical infections, as in dogs, no doubt also occur. Death resulted in none of the reported cases.

The only permanent sequela reported was a

TABLE 2

Reported Cases of L. Canicola Infection

	AUTHOR	COUNTRY	NO. OF CASES	YEAR REPORTED	CLINICAL PICTURE	LENGTH OF COURSE	RELAPSES OF TEMPERATURE	ICTERUS	RENAL SYMPTOMS	MENINGEAL SYMPTOMS	URINARY FINDINGS	BLOOD FINDINGS	
(1)	Walch-Sorgdrager, Roos, Schuffner	Holland	12	1937–39	Fever, chills, myalgia, headache, episcleral injection; weakness during convalescence.	Up to 30 days	9 cases	Slight and transient in 2 cases.	Not remarkable.	In 4 cases.	Transient albuminuria and cylindruria in a few cases.	Same picture as in Weil's disease.	(1)
(2)	Meyer	U. S. A.	2	1938	Undulant fever course in 1 case.		Mentioned in 1 case.	Present in 1 case.	Hemorrhagic nephritis in 1 case.				(2)
(3)	Tetzner	Austria	1	1938									(3)
(4)	Brammer et al.	Denmark	6	1938	Influenzal in character in all cases.	14 days of acute illness and 3 months before complete recovery in case reported in detail.	Relapse after 5 days in case reported in detail.	None.	Not remarkable.	None.	Transient albuminuria.		(4)
(5)	Bukh	Denmark	1	1938	Undulant type of fever with nephritis.	Approximately 6 weeks.	After 2 weeks of normal temperature.	None.	Nephritis with uremia but no hematuria.	None.	Albumin and casts.	W.B.C. 8,100, 5,400, 6,500; differential not remarkable.	(5)
(6)	Snapper	China	2	1940	Fever, chills, headache, malaise, myalgia, nausea and vomiting, conjunctival injection, vitreous opacities in left eye 8 months after discharge in 1 case.	8 days in 1; 8 weeks in the other.	None in 1; irregular fever throughout in the other.	None.	None.	Present in both cases.	Slight albuminuria.	12,700 with 89% neutrophiles in 1 case; 17,520 with 82% neutrophiles in the other.	(6)
(7)	Bjorneboe	Denmark	2	1941									(7)
(8)	Bruno et al.	U. S. A.	2	1943	Case reported in detail began with respiratory infection followed by fever, jaundice, and hematuria; illness quite severe.		Present in case reported.	Present in case reported.	Uremic symptoms in case reported.	None.	Occasional leukocyte; bile 3 plus.	W.B.C. 13,600 with 65 per cent neutrophiles.	(8)

vitreous opacity 8 months following hospital discharge of 1 of Snapper's cases.

It is evident from the foregoing that the clinical pattern of canicola fever is so similar to that of Weil's disease that clinical differentiation is impossible.

DIAGNOSIS

A history of intimate contact with dogs, whether ill or apparently normal, is often of importance. That canicola fever is a definite occupational hazard among veterinarians was first pointed out by Meyer et al.[7] It is to be emphasized that the diagnosis of canicola fever, like Weil's disease, is made in the laboratory and not at the bedside. Serologic tests are the most practical aid to diagnosis. These methods have proven reliable provided that sterile, nonhemolyzed serums are used. The agglutination-lysis test of Schuffner and Mochtar and the simple agglutination test have been most widely used. Larson[8] states that a titer of 1:100 is significant of past or present infection.

The fact that there is a strong cross-agglutination between *L. icterohemorrhagiae* and *L. canicola* is of great importance, since titers of 1:1000 against the former organism have been reported when the titer for *L. canicola* was 1:10,000. That this is important is understandable in view of the fact that the clinical picture of Weil's disease and canicola fever are the same. Hence, if the patient's serum were tested only against the Weil's organism the diagnosis of that disease would be made. This is not merely an academic point but one of great importance from the public health standpoint and also in regard to attempts at specific therapy.

The use of the dark-field microscope to demonstrate leptospira in the blood during the febrile stage is of no avail according to several authorities.[1,8,9] During the stage of leptospiruria dark-field examination of the centrifuged specimen has been advocated as a method of demonstrating the organism. Meyer states that it is important that the pH of the urine be above 7.0, since an acid urine is inimical to the leptospira.

Larson[10] has devised a mouse protection test to aid in the diagnosis of leptospirosis which he says offers a specific and easily interpreted test for this purpose.

The conditions to be differentiated from canicola fever are Weil's disease, undulant fever, relapsing fever, typhus fever, malaria, catarrhal jaundice, acute yellow atrophy, toxic hepatitis, and similar febrile conditions of obscure origin. The meningeal and renal complications of the infection are apt to be confusing factors.

PROPHYLAXIS

Canicola fever can be prevented by early diagnosis of the canine infection so that the animal can be isolated and its urine disinfected. Meyer has emphasized that the urine of these dogs should be repeatedly examined for leptospira before returning them to their owners. He states that dogs with positive urinary findings should be placed on a regimen to render the urine acid and therefore unsuitable for leptospira. The recognition and treatment of the canine infection thus is an important veterinarian problem.

Prophylactic vaccination of human beings against *L. canicola* has not been reported. According to Smith[11] good results have been secured in protecting animals against Weil's disease, but the clinical results from vaccination cannot be conclusively evaluated.

TREATMENT

Meyer mentions that in dogs convalescent horse and rabbit serums were used with striking success in California. Large doses (10 to 50 c.c.) were employed intravenously during the first 10 days of the illness. As in the use of the Weil antiserum it is important that the serum be used early. There have been no reports concerning the use of such immune sera in human beings.

Summary

A case of human canicola leptospirosis has been reported and the literature on this subject reviewed.

The probable existence of a large canine reservoir in the United States with some potentiality for human infection has been pointed out.

The importance of doing agglutinations against both *L. icterohemorrhagiae* and *L. canicola* simultaneously has been emphasized because of the similar clinical picture resulting from infection with these organisms and the occurrence of a strong cross agglutination between them, which may result in an erroneous diagnosis of Weil's disease.

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Suggests voluntary control of patent medicine advertising. The time seems ripe for more positive voluntary control by American newspaper publishers of the more blatant advertisements of proprietary remedies in order to avoid the danger of control by governmental decree such as has taken place in Argentina, *The Journal of the American Medical Association* for December 4 suggests in commenting on a recent action taken by the publishers of London, England, newspapers aimed at bringing under control such advertising abuses. *The Journal* says:

"The better newspapers in this country for years have attempted to exclude the more blatant advertisements of proprietary remedies. A few—too few—have even banned advertising of this class altogether. In Britain, where the situation with regard to extravagant claims has been generally much worse than here, a long step forward has just been taken. As told elsewhere in this issue, London newspapers, through their trade association, voluntarily have adopted regulations which should greatly improve the standard of control over such advertising claims. In this country too the time seems ripe for more positive voluntary action by publishers to avoid the danger of control from above by decree, as in Argentina where almost complete government control of drugs and drug advertising has been established [reported in the same issue of *The Journal* by its regular Buenos Aires correspondent]."

In the same issue of *The Journal*, its regular London, England, correspondent reports that:

"Blatant claims to cure all sorts of diseases made in the newspaper advertisements of proprietary medicines have long been a scandal. At last, this practice is to be checked. The Newspaper Proprietors Association has unanimously adopted the following rules: 1. No advertisement will be accepted for any medicine or treatment which is claimed to be effective in Bright's disease, cancer, tuberculosis, diabetes, epilepsy, fits, locomotor ataxia, disseminated sclerosis, osteoarthritis, spinal, cerebral and venereal diseases, lupus or paralysis or for preventing any of these ailments; for the cure of amenorrhea, hernia, blindness, rheumatoid arthritis or any ailment of the auditory system; for procuring miscarriage; for the treatment of habits associated with sexual indulgence, or for any ailment connected with these habits. 2. No advertisement will be accepted from any advertiser who by printed matter, orally or in his advertisement, undertakes to diagnose any condition or to receive a statement of any person's symptoms with a view to advising or providing for treatment by correspondence. 3. No advertisement will be accepted containing a testimonial other than one limited to the actual views of the writer, or any testimonial given by a doctor other than a recognized British medical practitioner. 4. No advertisement will be accepted containing illustrations which are distorted or exaggerated to convey false impressions. 5. No advertisement will be accepted which may lead persons to believe that the medicine emanates from any hospital or official source, or is any other than a proprietary medicine advertised by the manufacturer for the purpose specified, unless the advertising agent submitting the copy declares that the authority of such hospital or official source has been duly obtained.

"These rules are now in operation in all of the London morning, evening and Sunday newspapers. Also all advertisements will be submitted to medical scrutiny and the products advertised to chemical analysis if this is considered necessary. This is the first time leading newspapers have unanimously laid down and insisted on a standard of control over claims made in advertisements."

PROBLEMS OF NEUROPSYCHIATRY IN THE UNITED STATES ARMY*

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IT IS an unusual privilege to be invited to discuss, on this particularly appropriate and widely representative program, some important and far-reaching developments in wartime neuropsychiatry in the Army. There can be little doubt by now that the disorders in this field constitute one of the most serious, many faceted, and challenging problems of this war.

Physical force has been frequently overshadowed by the less obvious but more effective and nerve-racking strategy of rumor, rapid movement, surprise, and skillful teamwork of mechanized ground, air and sea units. Our enemies have utilized a complex program, carefully devised, for its devastating effect upon the minds of their opponents both civilian and military. This is truly psychologic warfare with its obvious hazards to mental stability. It seems logical, therefore, that in the present war the mental health of soldiers is fully as important as the physical. What has neuropsychiatry learned during the last twenty-five years which would assist in the rapid selection and training of an army which can withstand both the physical and mental hazards of this new type of fighting? Let us see what has happened.

World War I, although different in its methods of warfare and therefore not strictly comparable to the present struggle, furnished some clues, and extensive civilian experience in preventive medicine and psychiatry has added significant information. The long experience of the Army with organization and its early recognition of the importance of mental factors in this war aided in the development of a general plan.

The numerous hazards of rapid and intensive training and world-wide activities involve a difficult adjustment from domestic to military life. Among the most common factors encountered are anxiety over family, new companions, new and strange diets, an inelastic environment, loss of liberty, rigid discipline, fatigue, monotony, new habits, fear of the unknown, and the necessity to learn how to hate and fight an enemy whose threat frequently may seem remote.

It has been observed that soldiers from communities with high morale are better prepared for the hardships of war, and neuropsychiatric casualties are fewer in combat areas where the morale is high and training has been extensive. Gillespie has indicated that the most common cause of nervous breakdown in soldiers and seamen in the British forces is the breaking up of families left behind. All these factors and the effect upon home areas of bombing and invasion threats have further emphasized the intimate relationship between civilian and military groups in the hazards of this war.

The scope of this presentation will not permit more than the unadorned comment that the problems of neuropsychiatry in the armed forces both in preparation and in combat cannot be comprehended or handled properly without full consideration of their civilian counterparts. Experience in industry has clearly pointed to the close relationship between efficient production and workers' domestic problems. The psychologic effect of enthusiastic local support, or the contrary, upon athletic teams is well recognized. It should be understood that the Army can deal only with neuropsychiatric problems within its immediate jurisdiction and, therefore, their solution is limited.

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* Read at the Fifteenth Annual Scientific Assembly of the Society, October 1, 1943.

† Died November 10, 1943.

ADMINISTRATION

To handle properly such intangible and complex factors related to almost every section of Army command, it has been necessary that a plan of organization be developed, tested, and altered to meet changing needs. It may be said that such a plan is already in operation, that it is far from perfection, but that it is still sufficiently flexible to meet new problems. This may be considered an optimistic sign. Shortly after the outbreak of the war, the Surgeon General, recognizing the importance of neuropsychiatric screening at induction and effective care of mental disorders, established a separate Branch of Neuropsychiatry whose general function may be described as advisory, organizational, administrative, educational, analytical and correlative where relationships with other governmental agencies are found advantageous.

In order that the various neuropsychiatric activities in this country and overseas may be coördinated and appropriate policies devised from experiences in the field, neuropsychiatric consultants selected from among unusually well qualified specialists in civilian life have been assigned to the staffs of service commands and foreign theaters of operations.

Because of the limited number of trained specialists available from some three thousand officially listed, it became apparent very early that it would be practically impossible to supply completely the total needs of the Army as well as other military services. Careful planning pointed to the advantages of the strategic placement of neuropsychiatrists at Army levels where prevention and early treatment could be most effective. Accordingly, medical officers with specialized training have been placed at induction stations remote from populous areas, where civilian specialists are not available. Since the first critical period in the new soldier's life is usually the replacement training center, neuropsychiatrists have been assigned to each center. Their function will be described later. For those soldiers who are sent directly to tactical units, neuropsychiatric outpatient clinics associated with post hospitals have been available, and recently authority was granted for the assignment of a neuropsychiatrist to each division. This plan was found effective in World War I. The function of the division neuropsychiatrist is to aid in screening and treatment, through close familiarity with units, from the point of training to combat. His primary duty will be to initiate and carry out preventive, therapeutic and eliminative measures as his training and judgment indicate. Neuropsychiatrists have also been assigned to ports of embarkation, station and general hospitals designed for service in this country and overseas, evacuation and field hospitals for duty in combat zones, and detention and rehabilitation centers in the various service commands in this country.

The response of the nation to the call for neuropsychiatrists has been commendable, since almost one half of those previously estimated as having specialized training have already entered the service. In so far as military strategy will permit, these physicians, because of the real need, will be assigned to neuropsychiatric duties.

SELECTION

The hazards of the present type of warfare have already emphasized the need for careful elimination at induction of those personality types and disorders which will become liabilities not only during the training period but during active combat. Frequently an oversight at induction, which is understandable because of the brief examination available, is reflected at the front in a type of disturbance which may not only risk the life of the individual but the lives of his comrades as well. There is evidence to show that, in spite of its too rapid character, the screening at induction is preventing larger numbers of susceptible individuals from entering the service than during the last war, when there were about two per hundred rejected for nervous and mental unfitness prior to induction. Since the beginning of 1942 the rejections for this cause include about one third of the rejections for all causes.

It should be understood that a diagnosis of psychoneurosis, which constitutes the largest group rejected for neuropsychiatric reasons, does not signify mental illness as commonly conceived. Rather, individuals with this disorder, in view of practical experience, will not stand up under the rigors of military life. However, most of these can and should continue to serve in their previous capacity in the community. Only a small number will require greater special care than usual. Many of the psychoneurotics are among the large numbers of chronic complainers with elusive physical symptoms who visit physicians' offices but seldom become hospitalized for nervous disorders. There has certainly been no test sufficiently well developed to detect all the psychopaths and potentially psychoneurotic individuals at induction. It is therefore understandable that many will escape even the finest and most careful screening and will break down under the stress of military training. This fact has already been established.

In order to protect properly the selection of 18- to 20-year old youths, regulations have been laid down that those who are found to be immature, either physically or mentally, may be deferred for reëxamination at the end of six months. This will usually prevent unwarranted risks to the underdeveloped.

Induction should be considered a process of selection of those fitted for military service and not for civilian occupations. Therefore, rejection, if justified, should carry no stigma.

Prevention, Detection, Adjustment and Elimination of the Mentally Unfit

The early period of training both at the replacement training center and in tactical units has been found to constitute the first serious hurdle. Commonly, after about three to four weeks of training, the incidence of mental disorders, particularly the psychoneuroses, reaches the highest peak. At this time the pressure of training and adaptation shows its most striking effect.

The Army has established mental hygiene units at all replacement training centers under the direction of specially qualified neuropsychiatrists. Here, with the aid of psychologists from the personnel service and a trained psychiatric social worker furnished by the American Red Cross, individuals who are emotionally and intellectually inadequate are referred by medical officers, unit commanders, chaplains, provost marshals and others for examination, treatment, or separation from the service, if the latter becomes necessary. Recently a classification has been established for psychiatric social workers because of the need for those in the service professionally trained to assist in mental hygiene clinic activities. With the aid of these clinics, it has been found that large numbers of those who otherwise might have required hospitalization have been salvaged for further service. Neuropsychiatric outpatient departments of hospitals serving tactical units have performed similar functions.

There has been a close relationship between the various medical, surgical and neuropsychiatric services in military hospitals, and this has permitted a further early consideration of the mental fitness of the individual, so that either a return to duty or to community life may be initiated at an early stage. The neuropsychiatrist has frequently been utilized to assist in acquainting those concerned with training with the principles of mental hygiene so that the new soldier may be able to adapt himself more readily to military life and overcome his natural fears and resentments. Such talks have been found so successful that plans are being developed to produce movies which will aid the soldier to a better understanding of such mental reactions which are to be expected and which may be diverted into useful channels for the good of the Army and for his own protection, especially when he reaches the combat zone.

Incidence of Neuropsychiatric Casualties

There is increasing evidence that the incidence of neuropsychiatric disorders is one of the most serious problems during the training period in this country and in the combat zone. Already the neuropsychiatric discharges have shown a gradual increase. Recognition of the needs of the Army in this war and combat experiences have increased the efficiency of screening out those who may eventually become combat casualties. However, it is the duty of every medical officer and unit commander to return to duty any individual who can be of use to the Army. Careful observation and repeated trial have shown that the psychoneurotic who breaks in early training is a poor risk. This is also true of the psychopath and, obviously, the frankly psychotic.

Types of Neuropsychiatric Casualties

It may be stated that there are no new mental disturbances in the present war, although various disorders, particularly the combat neuroses, have been given such innocuous titles as "combat fatigue," "pilot fatigue," "flying fatigue," "exhaustion," and others. The psychoneuroses comprise the largest group of mental disturbances both in the combat zones and in the training areas, constituting about 70 per cent of those discharged for neuropsychiatric conditions. These occur in the following classifications, in order of their incidence: (1) anxiety states, (2) hysteria, and (3) reactive depressions. The anxiety states far outnumber all other types. Many of these have been labeled "exhaustion" in preference to "anxiety state" upon their return from the front lines in order that the recoverable nature of their symptoms may be emphasized, with increased likelihood of return to duty. Otherwise, symptoms become fixed in anticipation of a rapid evacuation to the rear.

The factor of fatigue hastens the breakdown in men with and without mental disorders. Even the strongest has his breaking point under the stress of modern warfare and, therefore, screening is not the complete answer to casualties. However, the predisposed, poorly integrated personality usually responds unfavorably to the stresses of both training and combat periods and to all therapy. Greater effort must be made to detect and eliminate such types at induction and during early training.

In one theater of operations it was noted that the psychoneurotic battle reactions diminished with increased battle experience. Those who fail to react during the first exposure are considered more stable. Of the psychoses, schizophrenia constitutes the largest number, although the incidence is relatively small. Many of these, in both the training and combat periods, have a rapid onset and the acute symptoms, frequently of the catatonic type, subside after a comparatively short period of hospitalization.

The constitutional psychopath has presented one of the difficult problems. Owing to his good intelligence he is often difficult to detect at induction and even well into the training period. He has frequently been urged into the Army by well-meaning but ill-advised parents, physicians, judges and others, with the hope that the Army will "make a man of him."

Considerable attention has been given to the study of effects of blast and resulting trauma. Cases with or without visible head injury, which were previously considered psychoneurotic or psychotic due to combat, were found to have evidence of brain damage. Careful consideration, therefore, is being given to all neuropsychiatric casualties so that these injuries may not be confused with purely functional conditions.

Contrary to popular belief, true malingering has not been an extensive problem. Where it has occurred it is frequently indicative of some underlying personality defect or mental disorder which renders the individual unsuitable for military service.

The problem of homosexuality likewise has not created serious difficulties. Army directives have provided a more enlightened and humane method of disposition. Homosexuals who have not indulged in this practice may be discharged because of traits of character not desirable in the military service. Those who have not been discovered in the act may now be handled by administrative discharges, if the facts so warrant, rather than being tried before a general court-martial and imprisoned if found guilty. This represents an adaptation of a more enlightened civilian attitude to military procedures.

TREATMENT

Therapy for mental disorders may be considered for two general groups, according to location, namely, (1) those in the combat zone and in the non-combat zone of the theater of operations; and (2) those in the training areas in this country. It has been found that the treatment of the acute combat neuroses, especially the anxiety type, is best given in evacuation hospitals. It consists of rest for 2 to 5 days; heavy sedation, usually by barbiturates; a well-rounded diet; and psychotherapy, consisting of reassurance and the release, under drug narcosis, of terrifying experiences excessively charged with emotion. By this method from 60 to 80 per cent of the combat neuroses may be returned to duty. Earlier British experience has coincided with these results.

Those neuroses which cannot be restored to full duty in 5 days and all psychoses are returned to the general and station hospitals in the rear. In one campaign less than 3 per cent of the cases returned to general hospitals were returned to combat duty, while in the evacuation hospitals more than 60 per cent were returned to duty after 4 days. At least 4 weeks of subsequent combat showed that 89 per cent of these, unless killed or wounded, were performing successfully. This confirms the importance of all possible treatment at the evacuation hospital.

It has also been found that the further the soldier is removed from the combat area the less likely are his chances for recovery and restoration to service. In both the larger general hospitals overseas and in this country, therapy is directed toward the improvement of the individual either for a return to duty or a rapid release from service. Encouragement is given to the application of such accepted procedures as will either stimulate recovery or assist the treatment of the soldier after he leaves the Army. A policy for the beneficial use of hydrotherapy and shock therapy has been authorized for certain types of disorders, such as the emotional states and certain types of schizophrenia. In addition, plans have been developed and are already operating for the use of occupational therapy in the large hospital centers in this country. This is being utilized as a part of a rehabilitation program for convalescents.

It is obvious that the Army, if it is to maintain the health of the fighting forces, cannot be burdened with the responsibility for prolonged hospital care. In many sections where individual psychotherapy, due to the limited number of neuropsychiatrists, is difficult, a program of group psychotherapy has been found beneficial.

MORALE

The principles of morale and preventive psychiatry may be considered identical; and since the importance of morale in the conditioning of a fighting force and its direct relationship to the incidence of neuropsychiatric casualties is recognized, a liaison has been established between the Surgeon General's Office and the morale service of the Army by means of a specially trained and selected neuropsychiatrist assigned to the Neuropsychiatry Branch. There is reason to believe that soldiers who know the principle for which they fight and are properly trained to fight are less likely to suffer nervous breakdown than individuals who have no understanding of the purpose of warfare and express a definite desire not to fight. Where the morale and leadership are of a high order, the neuropsychiatric casualties have been comparatively few. Therefore, it seems particularly appropriate that the service which has the responsibility for morale activities be coördinated with the branch of the Medical Department which is most closely concerned with the mental reactions of soldiers.

It is here that prevention has its most difficult and important implications. The Special Service Division has accomplished much through athletics, recreation and entertainment. However, morale and prevention are considered dependent upon other factors as, for example, the selection and serving of food, the concern of the commanding officer for the welfare of his unit, and the qualities of leadership displayed.

The neuropsychiatrist is well qualified by experience and training to assist in the development of the proper attitude toward such difficult problems as fear. It is the neuropsychiatrist's function to point out to soldiers that fear is a normal reaction which calls forth certain physical symptoms experienced by even the bravest and that fear can actually prepare the individual properly to fight. The importance of the substitution of fear of combat for the fear of the consequences of defeat is essential.

TRAINING IN MILITARY NEUROPSYCHIATRY

To aid the newly commissioned neuropsychiatric medical officer to adjust to a practice in the Army radically different from that in civilian life, training has been organized in medical pools of large general hospitals. The military neuropsychiatrist is primarily a medical officer and secondarily a specialist. The broad and potentially beneficial impact of his special skill upon soldier problems is frequently dependent upon his own sound transition. Seldom in medicine has this factor been so critically important. In the training pools of general hospitals the neuropsychiatrist is introduced to military régime and the special requirements of neuropsychiatric service. Here he becomes accustomed not only to neuropsychiatric symptomatology modified by military life but to various necessary administrative procedures.

As an additional aid to the training of these specialists and in the interests of uniformity and efficiency in the difficult disposition of neuropsychiatric casualties, a School of Military Neuropsychiatry has been in operation for a considerable period at a large Army general hospital in Atlanta, Georgia, under the direction of a professional teaching staff thoroughly experienced both in military and civilian practices in neurology and psychiatry. This school is under the immediate direction of Colonel William C. Porter, M. C., who was formerly Chief of the Neuropsychiatric Section at Walter Reed General Hospital, Washington, D. C. The School offers 190 hours of instruction in the handling of combat and other casualties and military medical administrative procedures. The School brings practical instruction in military neuropsychiatry to an Army center where casualties not readily available in civilian life are appropriate for study. To bring the teaching closer to actual combat experiences, approval has been recently authorized to move the School to a large special Army neuropsychiatric unit at Long Island, New York, where patients from overseas commands are admitted. This new location will also place the teaching facilities close to a large civilian neuropsychiatric center. Officers are assigned to this School monthly from Army Service, Ground and Air Force installations. The advantage of a mutually beneficial exchange of experiences by those in various sections of the country can hardly be overestimated. A special neuropsychiatric hospital unit has been organized in the European Theater of Operations which is staffed by well qualified specialists. Here a course of indoctrination for officers newly assigned to duty has been organized.

There have been many valuable lessons learned thus far from selection to the handling of difficult neuropsychiatric problems in the combat zones. Many of the procedures developed are outgrowths of principles well established in World War I but modified to suit the requirements of the present highly mechanized and mobile warfare with its distinct emphasis upon prevention and early treatment.

This global war presents to the Armed Services an unprecedented opportunity for the better understanding of human behavior. It makes possible a tremendous contribution by neuropsychiatry to the success of the greatest coöperative effort in all history and to future developments in this important field of medicine.

Tuberculosis has been present for so long and people are so accustomed to it, that the interest of the public and of many public health workers is in danger of being sidetracked to more glamorous and exciting problems. This is a serious deterrent to accomplishment in this field. Further, the decline in tuberculosis, both in morbidity and mortality, in the last 40 years, may lead some to think that the problem is one of the past. Let there be no mistake in this direction. Tuberculosis continues to be a real problem. If, instead of comparing the tuberculosis rate of today with what it was 50 years ago, one will compare the tuberculosis prevalence and mortality of today with today's prevalence and mortality of other diseases, the present seriousness of the tuberculosis problem can be appreciated. In the most productive period of life, tuberculosis continues to cause more deaths than any other one disease. Ed., Amer. Jour. Public Health, July, 1943.

The opportunity offered by routine X-ray or fluoroscopic chest examinations of adult admissions to general hospitals as a source of tuberculosis case finding has not been fully utilized. In a recent survey in a New York hospital tuberculosis was found in approximately 4% of the patients. These cases would not otherwise have been detected. Of these 2.8% had reinfection disease and 0.6% had active or questionably active disease requiring hospitalization or close observation. William G. Childress, M.D. et al. Jour. Amer. Med. Assn., Aug. 14, 1943.

Although the tuberculosis hazard in industry, to the young and especially to young women, is recognized by voluntary and official health agencies and by many others concerned, it is not at all appreciated by young women. Actually, girls going into industry tend to believe that they acquire ruggedness by virtue of donning pants and getting their faces dirty. This attitude calls for sound and far-reaching instruction as to diet, rest, the danger of time-and-a-half and double time. It calls, too, for properly managed plant cafeterias and proper plant ventilation, for good public health nursing in the industrial community, for sound medical advice. In fact, it demands all those measures included in a good industrial hygiene program, including careful preplacement examinations and periodic X-ray surveys. Ed., Amer. Jour. Public Health, July, 1943.

In spite of wartime difficulties the Ministry of Health (British) has decided to intensify the offensive against tuberculosis. The new campaign has been summarized as one which will no longer require medical science to wait for tuberculous cases to come to it, but will enable it to go out and look for them. It is true that there were 25,000 deaths from tuberculosis in 1942, as compared with 28,000 in 1941 but this encouraging sign has not induced any complacency in the Ministry of Health. Even in wartime the nation cannot afford to ignore an enemy which kills 25,000 people a year. Ed., Jour. Roy. Inst. P.H. & Hyg., June, 1943.

HOSPITAL AND ADMINISTRATIVE PROBLEMS IN WARTIME CIVILIAN MEDICAL PRACTICE*

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SOME twenty types of professional and technical and some fifteen types of nonprofessional personnel are required in the average hospital; and in wartime, with the acute manpower shortages in every field, that means thirty-five kinds of headaches for the hospital administrator due to personnel problems.

Twenty major classifications of material and supplies, outside of large items of plant and equipment, are required in the average hospital; and in wartime, what with priorities, rationing and critical scarcities, that means twenty more headaches for the administrator due to purchasing, substitution and conservation problems in connection with obtaining necessary supplies.

With these fifty-five problems of staff and plant maintenance baffling him, the administrator has a few more added by reason of the fact that the dangers of enemy attack in this country are by no means over, and he must see to it that the hospital is prepared for any wartime emergency. Only a few days ago the new Acting Director of the Office of Civilian Defense, Mr. John B. Martin, issued a statement in which he declared:

"I believe strongly that the danger of bombings in this country has not passed. This view is based on the opinion of military authorities. There is no doubt as to the continuing possibility of enemy planes reaching the United States. The probability is a question which the enemy rather than ourselves decides. Furthermore, there is a constant threat of action by enemy saboteurs which would result in major disasters throughout the country."

Mr. Martin went on to say that modifications of previous rulings of the Office of Civilian Defense, such as the recently proposed relaxing of the dimout on the West Coast, are being considered on a regional basis after careful analysis of all factors in different sections. The degree of preparedness and standards of organization required for civilian defense will, from now on, vary with the degree of risk involved in the locality. He concedes that the defense needs of remote rural spots in the center of the country are materially different from those of coastal or highly industrial communities. Nevertheless, he warns that in the smaller inland communities there is increasing need for the strengthening of protective services through voluntary effort in order to supplement the depleted normal services of the community such as police, fire and medical. Obviously, therefore, the hospitals in every locality, though some in greater degree than others, are still required to be on the alert from the standpoint of civilian defense.

Now, with problems of organization for civilian defense added to those of manpower and material shortages, the administrator has confronting him a fourth great problem, the fact that increasing numbers of patients are seeking admission to the hospital. This is due to six major causes, as follows:

1. More births—in 1942 there were 265,659 more live births in hospitals than in 1941, and this year the number will be considerably higher than the 1,670,599 total in

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* Read at the Fifteenth Annual Scientific Assembly of the Society, October 2, 1943.

1942. Since 1929 births in hospitals have increased more than two and a half times.

2. More industrial accidents, due to greatly increased industrial activity, occasioning speeding up of production and employment of new, inexperienced workers, who are careless, and also some older workers, who are lacking in alertness to danger.
3. More demand for hospitalization because of crowded home conditions in industrial areas, many of which have multiplied in population so rapidly that hospital facilities could not be expanded fast enough to keep up with the demand.
4. Higher incomes, which permit financing prompt correction of pathologic conditions, as many, during the depression years, postponed attention to conditions for which they are now seeking treatment.
5. Increasing number of persons, now totaling about 13,000,000, who have budgeted hospitalization expense through the Blue Cross plans.
6. Constantly growing consciousness that the person who is sick or injured stands the best chance for recovery and restoration of normal function in a hospital, where the aids to scientific medical care, both personal and material, are concentrated for his benefit.

Apropos of the last point, it is in a way ironical that the seeds we have sown in efforts to educate the people concerning the advantages of hospital care should be sprouting so vigorously at a time when we are hard pressed to give them, in many instances, the bare essentials of care.

Improperly handled, the patients cared for during this war period will sow a crop of ill will for hospitals to harvest later. All of the headaches due to manpower and material shortages, and preparation for emergencies under civilian defense, are mild and transitory compared with the chronic one the administrator has over this problem of satisfying patients. And let there be no mistake over the certainty that unless members of the medical staff share his concern, and aid and abet the administrator in measures to meet the situation, they also will be caught in the whirlwind of desire for change that may endanger voluntary hospitals and private practitioners in the period following the end of the war. Unquestionably what will happen to hospitals and doctors after the war is being determined to a certain extent by the way they are rising, or failing to rise, to the emergency needs right now.

It is amazing how wide the variations are between the way different hospitals are meeting wartime difficulties. Our reports of surveys of the current year make sometimes inspiring, and sometimes discouraging, reading. It is not to be denied that a few hospitals have slipped below the high standards of service which they have maintained in the past. Glibly the excuse comes, "It is because of the war." Other institutions, however, frequently under circumstances that give them more reason for such an excuse, have no occasion to offer it. They are heroically striving to conquer their problems, and are succeeding, to the satisfaction of their patients and the inspiration of observers. The war needs are stimulating them, rather than being seized upon to condone backsliding.

The medical staff of the hospital must not be an impediment to the maintenance of high standards. I am certain that a better understanding, a broader and more objective viewpoint, a vision of the far-reaching benefits of closer coöperation with the administrative staff of the hospital, would change an attitude of indifference on the part of any staff member to eagerness to do five extremely important things:

1. Help to maintain high quality of medical service by restricting appointments to qualified medical staff members, by seeking frequent consultations, by continuing to insist upon essential diagnostic procedures, and by not attempting work for which he is not qualified.

2. Write complete, accurate and scientific medical records as promptly as possible.

3. Attend medical staff conferences regularly, despite the pressure of work, and contribute to their objective of a thorough analysis and review of the clinical work of the hospital. To neglect this important duty during wartime is to court disastrous consequences later, for upon it depends the scientific progress of the hospital.

4. Support constructive measures for improving the facilities and services of the hospital.

5. Coöperate in every way to keep the right spirit of devotion to the best interests of the patient permeating the hospital.

Sometimes this last aim is achieved in roundabout ways. I have spoken of the danger of public disfavor toward the hospital being sown in these critical times when service is stripped to essentials, and personnel are so busy that they have no time for the little niceties which improve relations with patients. Well, one of the methods which is being employed to counterbalance this danger is to utilize volunteers. Physicians must be patient with these volunteers. They frequently lack the skill, the poise, the intuition of the trained worker; they are in the way sometimes. Yet, with the shortage of graduate nurses and other professional personnel their services must be utilized whenever possible. It is highly important that irritation with their awkwardness be not displayed by the physician for three good reasons:

1. Without volunteer workers, most hospitals today simply could not operate. They are helping in the admitting department, in the medical records library, in the medical library, in the dietary department, in occupational therapy, in directing visitors, in the performance of routine nursing duties under supervision. In practically every department of the hospital we find them, and a few are trained workers who had retired but are now giving their services to help the war effort. In the aggregate, volunteers are rendering magnificent, indispensable service of enormous proportions.

2. Volunteers are likely to show a warmer sympathy toward patients than some trained workers who have acquired a professional manner and nowadays are too rushed to linger for the personal touch in service to the patient. Many patients have expressed gratitude for kindnesses shown by volunteers. This all helps in building good will toward the hospital.

3. Volunteers are representatives of the public which judges hospitals. Frequently they are influential representatives. Treated patiently and appreciatively, they will be liaison personnel who will stimulate good will. Treated curtly, they will be creators of distrust and ill feeling toward the hospital and its staff, now and in the future.

It is far from my intention to underestimate the wonderful service that our regular professional and nonprofessional personnel are rendering. All who have remained at their posts are giving extra service to help compensate for the shortage due to losses to the military services and other vital work. Nevertheless, their work is their career and their means of sustenance. These others are taking time from their careers and from their leisure to give service without compensation in money or glory just because they believe that in hospital work they can find the best outlet for their urge to relieve suffering and to help the war effort. It is a tribute to hospitals that these people have this attitude; that it has been possible to form an astoundingly large army of men, women, boys and girls to invade hospitals for the good purpose of keeping them operating with a sufficient staff to serve their communities. I believe that one beneficial and lasting result of the wartime difficulties will be the gaining by these people of an insight into the marvelous service that modern hospitals are equipped to give, with their highly trained medical staffs to direct the professional care of the patient.

Of course, organization and proper utilization of volunteers are administrative responsibilities that are aggravated in wartime, when the numbers are much greater than normally and the duties delegated to them are also more numerous and complex. The larger hospitals need a full-time, paid director of volunteer workers, responsible directly to the administrator while working closely with the heads of the various departments affected. Smaller hospitals should have a volunteer as director, and she must be carefully chosen.

The training of these volunteer workers and of all the new employees that it is necessary to hire today in hospitals is an enormous administrative problem. Fortunately, epochal advances have been made in methods of training since the beginning of the war. Some of these have been learned from the Army and the Navy, which have had to meet the greatest manpower training program in the history of the United States and meet it expeditiously. Other methods have been devised in industry, and may well be imitated in the training of certain classes of labor in hospitals.

A special branch of the War Manpower Commission, the Training within Industry Branch, has borrowed industrial experts to develop procedures to teach supervisors how to instruct their crews to do their tasks correctly and quickly. The main feature of the new process is not merely to describe the procedure, not to show the new man how by doing it yourself; it is a combination of describing and doing, plus having the man go through the process himself at the same time. Another important factor in this "job instruction training" is the explanation to the worker of exactly why it is better to perform the task in a certain way, and of how his task relates to the entire process of manufacture or service.

A number of hospitals and clinics have adopted this new training system for hospital personnel. Last May at the Tri-State Hospital Assembly in Chicago it was explained and demonstrated to the engineers', housekeepers' and laundry managers' sections. It is one of the reasons why the manpower shortage is not proving as disastrous as we feared it might be for hospitals. By making the workers that we have more efficient, and by properly and quickly training new ones, we are getting along fairly well in most hospitals.

I think that the same thing might be said about the shortages of materials; they are not as bad as hospitals feared they would be. The reason for this is that strenuous efforts are being made by the government to institute relief measures. A consultant on hospitals, an experienced hospital administrator, was appointed to the War Production Board; and through him hospitals could make requests for priorities and enter complaints with the assurance that they would have an understanding intercessor. This has been an invaluable help. The Office of Civilian Requirements which has been organized under the War Production Board is also a helpful agency. Through simplification, standardization, and experimentation with substitutes, this bureau is working to save materials; it is also taking cognizance of shortages which are proving to be real hardships, and it is attempting to ameliorate them. Thus the hospital administrator who registers his complaint properly with the right office, meaning that he must constantly keep up on the changing government bureaus and what they are doing, has a large chance of getting essential supplies.

In War Manpower Commission rulings there has also been a tendency to be lenient with hospitals. Hospitals cannot pay salaries equivalent to those that workers can earn in war industries, which means that turnover is very heavy. However, some hospital employees have been declared essential workers and some leeway has been given in increasing salaries without special rulings by the Boards. This comes under the provision that earnings equal to those paid in comparable pursuits in the community are allowable.

Speaking of rapid turn-over of employees in hospitals reminds me of a statement made by a hospital administrator at the recent Chicago Institute for Hospital Administrators which I directed. He said that in the hope of retaining key employees, his hospital had introduced an extensive training program in which the aim was to give them opportunities to learn and to broaden themselves so that they could be advanced. After a year's experimentation with the program a check-up was made which showed that only 35 per cent of the workers who had been enrolled in the training program at the beginning had remained in the employ of the hospital. In other words, the training program had fitted them for better jobs, but elsewhere. Needless to say, the program was drastically curtailed. This shows that every administrator must test conditions in his own institution and devise a program for retaining and training personnel that applies especially to it and that proves to be practical and effective.

In the retention of professional employees the administrator also has government aid. The Procurement and Assignment Service has been functioning to help him retain essential medical personnel, and just recently nursing has also come under its jurisdiction. The United States Cadet Nurse Corps is providing an impetus to the enrollment of student nurses, and through it funds are available to help hospitals finance the increased nursing education programs. It is an important administrative function, therefore, to keep informed on developments in nursing, and to coöperate with the director of the nursing school in promoting the nurse recruitment program. The military forces need more nurses, and to reach their quota of 60,000 nurses by the end of the year, at least 3,000 a month must enroll for military service in October, November and December. All authorities agree that the chief hope for keeping nursing service going in civilian hospitals is to bring the student nurse cadet corps up to at least the 65,000 new students aimed for in the twelve months which began September 1.

Any worthy project that promises to alleviate the nursing shortage in hospitals should have the support of physicians, and that is the case with this United States Cadet Nurse Corps which came into being on June 15, when President Roosevelt signed the Bolton Bill after its passage by Congress. A gratifying increase in enrollment in most nursing schools for the autumn classes resulted, but the recruitment campaign must not lag.

Briefly, the plan of the Corps is to enroll student nurses who pledge themselves to continue in essential nursing service for the duration of the war. They are not required to promise to join the Army or Navy Nurse Corps when they are qualified to do so. They have free choice of military or civilian service. The cadet nurse receives a stipend of $15 a month for the first 9 months of study; $20 a month for the following 15 to 21 months of combined study and practice, depending upon the curriculum of the institution; and is furnished uniforms and free tuition, fees and other incidentals. The senior cadet receives a minimum stipend of $30 a month, but this is paid by the institution which she serves, either the one in which she received her preliminary and junior training, or one to which she is transferred to complete her training until graduation. Nursing schools are reimbursed by the government for reasonable tuition and fees for the courses of study and training; for reasonable maintenance for the first 9 months of the course of study and training; for uniforms and insignia; and for the minimum rate of stipend specified previously for periods prior to completion of the course of combined study and training. In order to participate, a nursing school must be approved by the State Board of Nurse Examiners, its acceleration program must be approved, and the hospital with which the school is connected should, if not already approved by the American College of Surgeons, seek approved status to expedite approval of its application.

The United States Cadet Nurse Corps is under the jurisdiction of the United States Public Health Service, actively directed by Surgeon General Parran with the assistance of Miss Lucile Petry, director of the New Nursing Division of the Public Health Service.

As for physicians, the Army and Navy are asking for 5,000 to 6,000 additional physicians to meet the quotas up to January 1, 1944. The medical staffs of hospitals must be further curtailed to meet this requirement. However, there is an important movement under way to distribute interns and residents more fairly, and the alert administrator is keeping himself informed of this development and is seeing to it that his hospital gets its just share. The plan is generally known as the 9–9–9 plan, and it has been approved by the Directing Board of the Procurement and Assignment Service, following recommendations offered to it by the Committee on Hospitals.

Under this plan internships and residencies are being changed over to 9 months in length to conform better to the 9-month medical school year under the accelerated educational program. One third of the interns who hold commissions in the Army and Navy may be deferred for 9 months (or for their tenth to eighteenth months of service). Then, one half of this number, or one sixth of the total number of commissioned interns, may be deferred for an additional 9 months (representing the nineteenth to twenty-seventh months in the hospital). As I have stated it, this proposal is in the modified form which has been accepted by the Surgeons General of the Army and Navy. Their acceptance is conditional on agreement by the state boards of medical examiners that eligibility for licensure of those who receive only 9 months' internship will not be impaired, and with the understanding that internships shall begin within 30 days after the completion of the medical course; also with the understanding that hospitals will limit their appointments of interns and residents to individuals who hold commissions or who have been officially rejected for commissions in the armed forces.

This plan will not assure ample interns and residents for hospitals, but it should give more fair allocation among hospitals. Inclusion of interns as well as residents in the allocation plan is for the reason, partly at least, that hospitals which have shifted from two-year to one-year internships have drained by approximately 1,400 the supply of interns which would in earlier years have been available to small hospitals.

For the average hospital, the allocation for 1944 will be somewhat less than two thirds of the 1940 number of residents and two thirds to three fourths of the 1940 number of interns. Quotas of authorized internships and residencies will be made for all hospitals approved for internships and/or residencies. In 1940 there were 15,800 interns and residents in both approved and unapproved hospitals, whereas in 1944 the estimated total is only about 8,100 from approved medical schools.

Of course this new plan entails many adjustments. Applications for deferments must be drawn up in accordance with the new rules. Men already accepted for 12-month internships must be informed of the change necessitated under the authority of the Armed Services. Some men who have been appointed to internships and residencies must be dropped and should be helped to follow the proper procedure in applying for new appointments. It still rests with the hospital to recruit and appoint its own interns and residents, since Procurement and Assignment Service has no power to assign men to a specific hospital. Educational programs must also be readjusted. It is extremely important that in so far as it is possible to do so, graduate training programs in medicine and surgery and in the various medical and surgical specialties should be maintained during the war period. This is important from the viewpoint of giving good medical service to patients now, and also after the war. It is also very important in order that opportunities for resumption of graduate training may immediately be available to the physicians who return from military service.

I believe that the postwar period will be a great progressive era in which our civilian hospitals will be absorbing and adapting the lessons

(*Continued on page 44*)

President's Page

1944

> "Behind the curtain's mystic fold
> The glowing future lies unrolled."
>
> —Bret Harte

We begin the New Year with confidence that better days are ahead. Our leaders have assured us that the Battle of Europe is entering its final phase, and that victory in this theatre of operations may be ours before the close of the year. Heartening though this is, we are warned that the cost in casualties will be high and greater sacrifices will be expected of us at home.

In other parts of the world our armies are also successful. But it is generally agreed that a stupendous task lies before us in the Far East. However, here also everything points to a decision in our favor.

As we are only too aware, the successful and early termination of the war depends upon many factors. At best the future is unpredictable. But so far as judgment and experience are a guide there is reason to believe that a new and better world will soon be in the making.

Under these circumstances, it is the duty of all of us to be prepared to meet new responsibilities. Our Medical Society, for example, is obligated to visualize the best it can conditions with which it will be faced. More than that, it must be ready to cope with them.

The responsibility of the medical profession was stressed the other day by Dr. Arthur F. Chace, President of the New York Academy of Medicine. Speaking to fellow members of the Academy, Dr. Chace said that their organization was earnestly seeking to anticipate the form of society in which we shall live. Studies, he reported, were being made to ascertain what course of action was indicated. These had been undertaken by a special committee, consisting of fourteen physicians and thirty-five leaders of thought in the fields of labor, law, social work, nursing, medical education, dentistry and public health.

"Our first year of study," Dr. Chace said, "has convinced us that the social pattern of the immediate future will be influenced by planning on the part of the Government, industry, labor and consumers, and that the Academy can and must play an active part in the adjustment of medicine and public health to this new social order."

To me this forward-looking and progressive view is realistic. It is one which I believe all of our members share.

We, too, are proceeding with studies and plans for the future. It is my hope that before the year is too far advanced a progress report will be submitted to our Society for its consideration.

1944 is not only a crucial year but one of challenge.

Fred R. Sanderson

Editorials

DON'T USE SULFONAMIDES

A few months ago the ANNALS published an editorial[1] which decried the indiscriminate use of sulfonamides in the therapy of dermatologic disorders. The author of that editorial discreetly indicated that there are very few diseases of the skin for which these drugs are effective and that, in case of doubt, calamine lotion or something equally innocuous is the drug of choice. The personal experiences of some of us during December 1943, when there was an epidemic of mild influenza in this metropolitan area, would seem to justify our reiterating, this time with a broader significance, that the sulfonamides are not a cure for everything.

It has been mentioned elsewhere[2] that fever is, for many physicians, sufficient indication for the administration of a sulfonamide. How true this is can be emphasized by the fact that the number of tablets of the sulfonamides used by persons in this area during December 1943 was more than double that used during the preceding December.[3] Since there was no important difference during these months in the incidence of pneumonia, meningitis, or other infections for which sulfonamides are more or less specifically necessary, and since the over-all occurrence of complications was strikingly low in the cases of influenza, it is safe to deduce that a good many patients had a sulfonamide prescribed strictly for their influenza. The arguments that the drugs may have been of value in curing the influenza or that their early use may have lowered the incidence of complications are a sad form of self-delusion; there is no background of evidence for the former, and the rapid, uncomplicated course of the disease in patients who did not take the drugs is a contradiction of the latter.

The administration of sulfonamides in cases of influenza is only one brief, local example of the misdirection of a potent therapeutic agent. It is almost impossible to imagine how much of these drugs is being used orally, topically, and even parenterally without good cause. Now, it is not the purpose of this editorial to list the diseases in which sulfonamides are of value. No more is its purpose to dwell on the toxic effects of these drugs, except to recall to mind that they do have toxic effects, sometimes lethal, and that their indiscriminate use must serve to increase the total incidence of such effects by an unjustifiable percentage. There are other, perhaps less obvious, dangers and disadvantages to the practice under attack. These deserve some consideration.

Before going further, it may be well to insert the trite statement that the sulfonamides should be used, with rare exceptions, only when a diagnosis has been made and the disease is one in which an important contribution may be expected from the treatment. When the prescription of the drugs does not measure up to this ideal, patient and physician alike will suffer. The patient may be unlucky enough to acquire some toxic reaction which will inevitably add to his morbidity. Escaping this, the expense of his illness may be unnecessarily increased because his otherwise misguided physician is more conscientious about following the course of the disease by means of laboratory and other observations than would be necessary if sulfonamides were withheld. The significance of his illness may become distorted in the patient's mind. Thus, the pharyngeal soreness which attends postnasal drip or a common cold becomes a "strep throat," term of dire omen, in the layman's mind when he receives a drug with a sulfa- prefix. Or the patient may be one of those unfortunates whose illness is so miscarried and its symptoms masked because of premature or injudicious use of a sulfonamide that the physician and his consultants become confused, with resulting detriment to all concerned.

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[1] Eichenlaub, F. J.: M. Ann. District of Columbia, 1943, 12, 234.

[2] Pepper, O. H. P.: Am. J. M. Sc., 1943, 206, 703.

[3] Information furnished by H. C. Kinner, Secretary, District of Columbia Pharmaceutical Association.

In these and other ways that the patient is affected, it is obvious that the physician also will derive his share of worry. In addition, one of the essences of his profession, namely its science, is endangered for reasons that Pepper has given very cogently in his recent article[4] on therapeutic fads. There is one other aspect of this problem of the indiscriminate use of sulfonamides which chiefly concerns the physician. At this time the manufacture and distribution of these drugs is an integral and vast part of our national war effort. Economy in use of the drugs represents national economy in the largest sense. Therefore, and in conclusion, Doctor, when in doubt, don't use sulfonamides.

H. H. H.

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[4] Pepper, O. H. P.: Am. J. M. Sc., 1943, 206, 703.

"THEY CAN'T EAT MEDALS"

A world at peace! How we anticipate the happiness which will follow the news that hostilities have ceased. It will indeed be a joyous occasion when victory has been won. But it will be tempered by many sad reminders of the price we have paid.

Colonel Joseph L. Martin, Surgeon of the 5th Army in Italy, warns the people of this country that they must be prepared to adjust themselves to the inevitable tragedies of war. "It is an unfortunate psychological shock," he says, "that awaits many families in the United States who, after the war, must give sympathy and consideration to their invalids. Medical men are not miracle workers. We can only do our utmost to save lives and prevent permanent disability to those under our care. People must expect to see the results of war." He mentions specifically that land mines have been responsible for amputations and also have caused "terrible damage" to face and arms. "The war is not over with the signing of the armistice," he concluded. 'These men whose lives we are saving will be soldiers as long as they live. Their fight won't have ended with their discharge from the service as disabled veterans. It will only begin. Above all, the folks back home must be preparing themselves to accept this sad part of our victory."

Physicians are naturally more aware than laymen of the disabilities which will afflict our soldiers. They realize only too well the need for the best medicine has to offer. Upon many of them will fall the responsibility for their care. What the Government proposes to do for the disabled veterans so that they will live useful and contented lives is, therefore, of deep concern to physicians.

In an effort to ascertain the extent of the Government's plans to rehabilitate our veterans and to apprise the public of the provisions which have already been made for their care, the *Milwaukee Journal*, one of the country's best newspapers, assigned one of its ace reporters, Frank Sinclair, veteran of World War I, the task of preparing a series of articles on this subject. Mr. Sinclair was tireless in his efforts to get at the truth. With considerable journalistic skill he unearthed many hitherto unknown facts. It was not surprising, therefore, that his articles attracted wide attention, especially when published in booklet form.

The second of a series of twenty articles was recently published under the appropriate title, "They Can't Eat Medals." In this series Mr. Sinclair writes of his investigation in Washington where he delved into such subjects as reemployment of discharged veterans, training for better jobs, orderly demobilization of our Army, rehabilitation of nervous and mental patients, and not least important the inefficiency which characterizes some Government organizations and institutions responsible for the rehabilitation program. The "four guide posts for behaviour in the presence of disabled and disfigured veterans of war" drawn up by the Surgeon General of the Army are also included in the booklet.

In sponsoring the publication of these articles, the *Milwaukee Journal* has rendered a public service for which it deserves the highest commendation. It is to be hoped that Mr. Sinclair's articles will come to the attention of additional thousands of parents, husbands and wives of those in the service who have not read them. It will give them a much better understanding of what their Government plans to do for their loved ones no matter what may befall them. Fortified by this knowledge, they will meet the casualties of war with greater fortitude.

Veterans of this war will not have to "eat medals."

LET'S ALL BACK THE ATTACK

The Fourth War Loan is on!

Between now and February 15 our Government is calling all Americans to the colors by asking them to "Invest For Victory" to the extent of fourteen billion dollars in War Bonds. Of this sum, Washington citizens are expected to buy $95,000,000 in Savings Securities, including $53,000,000 in purchases by individuals.

This individual quota is $10,000,000 more than was raised in that category here during last September's Third War Loan drive. It will require EXTRA EFFORT and EXTRA BOND BUYING by every person in Washington if the goal is to be reached.

Most of us in the medical profession have seen hundreds of reasons for extra effort and extra bond buying in the Army and Navy hospitals in the Washington area. Lying in beds there are boys who have given their all—boys who will never again do things with two hands, or walk with two feet, or see with two eyes.

These American boys make our petty sacrifices here at home seem puny by comparison. They have spilled blood for us on battlefronts in every part of the world, yet they don't ask our sympathy—no, not one of them.

What they Do ask and expect, is that we lend support to the sacrifices they have made and the sacrifices millions of more boys like them are making for us every day.

The boys realize, far more than we can, how fast war uses up our machines, ammunition and equipment. They know that the tanks and guns that took Tarawa must be repaired or replaced before they can thunder down the road to Tokyo.

They know the landing barges that brought our men to the perilous beaches of Salerno must be repaired and re-outfitted before they can drive ashore in France or the Balkans.

They know we cannot win the war with the bullets our bonds bought last summer. Those bullets are already buried in Jap and Nazi graves.

Therefore, as War Bond Chairman of the Professional Division of the District of Columbia War Finance Committee, I urge every member of the medical profession in the Nation's Capital to buy all the War Bonds possible during the Fourth War Loan, in addition to influencing others to do likewise.

The District Medical Society has effected an organization for the drive designed to make an office-to-office and desk-to-desk canvass of Washinton's medical group. The organization has set for itself a goal of $560,000 in War Bond purchases and sales to cover the cost of an ambulance plane, an equipped hospital train, and a 1000-bed hospital.

The following chairmen have accepted the task of directing our efforts:

Dr. A. Magruder MacDonald, Northeast Section
Dr. Charles Stanley White, Medical Buildings
Dr. Charles X. Suraci, Southeast and Southwest Sections
Dr. Jos. J. McCarthy and Herbert E. Martyn, Northwest Section.

When these men or their lieutenants solicit your War Bond subscriptions during the campaign, buy all the bonds you possibly can. Let's All lend the mere money price of victory. "Let's All Back the Attack!"

W. Calhoun Stirling, M.D.

In and Out of Focus

BY THE OBSERVER

Plain Talk Those who have attended meetings of medical organizations in the past year or two have heard some pretty sharp criticism of the manner in which their affairs are conducted. Usually it is confined to the privacy of a corridor or some hotel room. Infrequently it is made in an open meeting.

The Annual Conference of Secretaries and Editors of Constituent State Medical Associations held at American Medical Association headquarters in Chicago last November was different in this respect. For there was some pretty plain talk at several of the meetings. It was quite apparent that officials of the A. M. A., chafing under some of the criticism which they had received, decided to bring controversial issues into the open.

There was the matter of public relations. Dr. Herman L. Kretschmer, President-elect of the American Medical Association, made the flat assertion that "the public relations of the American Medical Association are being handled perfectly." He quite evidently thought of public relations in terms of publicity because he commented on the efficient manner in which the press and others were given information. Of course, publicity is just one phase of public relations. There were a number present, therefore, who disagreed with Dr. Kretschmer.

The other subject which stirred things up a bit was the manner in which the Coöperative Medical Advertising Bureau, which obtains advertising for state medical journals, is being conducted. Discussion of this matter was not restricted to the operation of the Bureau by any means. It drifted off into many other things, most of them involving criticism of the Association. Your Observer is under the impression that the Bureau has done a good job. He understands that the Bureau's relations with the Medical Annals of the District of Columbia have been very satisfactory.

The closing paper dealt with the Emergency Maternity and Infant Care Program for enlisted men's families. Strenuous objections were raised to the program, principally to the control which would be exercised over the physician's services and his fees. It was charged that the Government had, through this program, "gotten one foot in the door." Having opened the door, the next step would be further expansion of Government medicine. As the program had been adopted and placed in operation in many states vehement protests were useless. Furthermore the Conference had no power to act. It is held largely for the purpose of exchanging ideas.

Your Observer has only this comment to make on the Conference. "Let us have more plain talk in open meetings. It is good for the morale."

★

"Stained with Ink..."

A physician-legislator recently raised his voice in the Congress against "creating a class of bureaucrats whose selfish interests maintain them in office." His remarks were directed particularly to the Wagner-Murray-Dingell Bill (S. 1611) under which he said the physician would be "regimented, pigeonholed, blueprinted and made to do a physical, mental and ritualistic goose step."

Representative Miller of Nebraska is more articulate than most of his professional colleagues, as the following extract from his talk clearly reveals:

> "I am sure the motives of the sponsors of these particular measures are entirely honorable and wholly altruistic. The arguments in support of them are plausible and alluring but the adoption of these measures would certainly lead to the erection of another bureaucracy to administer them. The resulting regimentation would first hamper the physician and then break down his morale, his initiative, and his effectiveness. The Director of the Public Health Service would be a czar over physicians. In him would be the power to direct where and when, and finally how to practice his art. Rules and directives would be promulgated in the central office that would progressively put the practice of medicine in a strait-jacket. The patient could be told to what physician he must report. If you do not believe this just pay a visit to any Social Security Board and see how those who are compelled to come to it for help are herded around and made to fill out endless forms. The physician's fingers would be stained with ink instead of iodine."
>
> "If I am any judge of the feelings of the American people I am sure they do not want to see the extension of bureaucracy. They want to recover their right of individual initiative and freedom of enterprise. They are tired of being bossed around by Washington. They certainly want the right when they are sick to select their own physician. One of the most powerful aids the physician has is the confidence his patient has in him. Many times it is more valuable than his most potent medicine. The controls set up under these bills would eventually destroy that precious aid."
>
> "It is impossible to set up a system of medical practice as suggested in the Murray-Wagner-Dingell bill without creating a class of bureaucrats whose selfish interests maintain them in office. They possess the poisonous virus of all bureaucracy..."
>
> "Bureaucracy grows and feeds upon itself. It produces dictators with absolute power and people are reduced to serfdom."

★

"Unless You Do Something..."

How often we have been told that "unless you do something" Government control of medicine will be thrust upon us. It is a warning with which the medical profession has become very familiar in recent years. We have good reasons to believe that this opinion is often expressed by uninformed persons who are simply repeating what they have heard. In fact this Observer has often asked such individuals for their suggestions with the result that he has received the vaguest sort of answers.

When Governor Darden of Virginia addressed the Seaboard Medical Association at Richmond on November 30, he came up with the familiar phrase. He warned "unless you do something" opposition to federalized medicine will be of no avail. "I do not want to see the Federal Government get control of medicine," the Governor said. "When the Federal Government steps in with its overall bureaucracy, medicine will lose its flexibility." According to press reports he then suggested that a plan might be worked out to provide medical facilities particularly in rural communities comparable to the hospitalization plan found in cities. "I would like to send to the next Legislature", he said, "plans to set up a study group to make definite recommendations."

At the same meeting Dr. C. Lydon Harrell, President of the Seaboard Medical Association, voiced his opposition to "socialized medicine." He cautioned, however, that the medical profession could not "sit idly by" or ask members of Congress to vote down such measures without offering some "better" plan.

Neither Governor Darden nor Dr. Harrell can be placed in the category of the uninformed. Both have definite ideas as to what should be done. We feel certain that the medical profession of Virginia will give thoughtful consideration to their proposals.

★

Epidemic in Washington

Physicians have frequently warned what would happen if there was an epidemic in Washington. Now that it has materialized and has passed its peak, one can contemplate how well the physicians remaining to care for the civilian population met the situation.

There are many facts, of course, which will not be known for some time. However, there are a few high lights which are revealing. For example, many doctors gave advice by telephone finding it impossible to visit all who called them. They relied in these instances upon the facts given them by persons in the home. One physician said that if the patient had a temperature of less than 102 he did not make a call. How frequently this occurred and whether it is indicative of the fact that physicians could not cope with a serious epidemic is not known at this time.

How many influenza cases there were, of course, no one knows. Undoubtedly a large percentage of the sick had ordinary colds. The District Health Department estimated in the beginning that there were eight thousand persons suffering from respiratory diseases. It was revised a few days later to 90,000 based on the survey of Government departments and business establishments.

The United States Public Health Service and the Medical Society of the District of Columbia made a "spot" survey of the situation. A letter was directed by the Medical Society's Committee on Public Health to some seventy physicians located in different sections of the city, all of them general practitioners. They were asked the following questions:

1. How many cases of influenza or colds have you seen during the weeks:

November 16–November 23
November 23–November 30
December 1 –December 7.

2. Would you say that for any of these three weeks the number is the same or higher than your experience in the past year?

3. If it is higher, state approximately how much higher.

4. Have there been any deaths among the above cases? If so, how many?

On the basis of returns received, it was estimated that each doctor attended 22 patients suffering from colds and influenza between November 16 and 23. The number increased to 36 patients between November 23 and November 30, an increase of 84 per cent over the previous week. During the week December 1 to December 7 it was reported that each physician treated an average of 68 patients, an increase of 207 per cent over the previous two weeks. Compared with last year, the increase was two to two and a half times greater than for the corresponding period. Cases, it was reported, have been characterized by mildness and with no deaths reported by the physicians questioned.

And so we have had our first experience with an epidemic during World War II. There is much to be grateful for. The epidemic was extremely mild and the death rate was very low. Only 34 have been reported to have died from all forms of respiratory diseases from December 1 to 15. This compares favorably with the figures for a year ago when a total of 67 persons died from these causes during the month of December.

While the number of persons affected is not known, in the opinion of many observers it was considerably larger than the estimates. In view of the congestion in Washington the rapid spread of respiratory disease was not surprising. A visit to downtown Washington in wartime just before the Christmas holidays is an experience to be remembered. An unbelievable number of people crowd every public conveyance and all business establishments. We will be fortunate if we escape further encounters with communicable diseases.

★

Taft on Postwar Problems

One of the more stimulating radio broadcasts over the N.B.C. network is a series entitled "For This We Fight." The program presented on November 13 was devoted to "Better Health Care." Among the speakers was Charles P. Taft, Director of the Office of Community War Services, Federal Security Agency. Mr. Taft's remarks on this occasion were of more than ordinary interest to physicians because of his official position.

In a prepared talk given at the beginning of the broadcast, Mr. Taft made the following observations:

> "We have always had too few doctors and they have always been badly distributed. The war has aggravated both these conditions.
>
> "It is clear that one great postwar health problem is the better distribution of doctors and nurses so that every single American can *get* medical care. At present there is no machinery to do this. Can the medical profession do it? Should the government take a hand? These are controversial questions which must be answered.
>
> "And this brings up another closely related postwar problem, the provision of more and better hospitals and clinics. These have also been too few and badly distributed, both conditions again aggravated by war. The Public Health Service estimates, based on ultraconservative ratios of beds to population, revealed that 400,000 new hospital beds must be provided immediately after the war at a cost of conservatively two billion dollars. One inducement to doctors to go where they are most needed, is to place and maintain *facilities* where they are most needed.
>
> "Assuming better distribution of doctors and nurses with better equipment at their disposal, how can we bring these services within financial reach of all the people? This is our third great postwar problem.
>
> "As a nation, we have become insurance minded. Millions of us are now insured against the major risks of life—unemployment and old age. Very few of us, however, are covered by insurance against the most unpredictable risk of all—sickness. Assurance that a man can pay for the ordinary costs of sickness for himself and for his family— for hospital expenses, doctors' bills, medical treatment, and for loss of salary during illness—this kind of 'health assurance' by some intelligent universal method is only common sense. It must be made available at low cost to the individual, low because the risk is spread, just as universally and as quickly as the facilities and services themselves are made available. In fact, you will not get the facilities and services unless there is provided a system of paying for them, coöperative group care of some kind, or health insurance.
>
> "But any broad program of health such as insurance must be concerned with prevention as well as with cure. By this, I mean the application of all our scientific knowledge to the prevention of disease. I mean broad programs of sanitation, housing, recreation, nutrition, and control of diseases such as malaria, on a much vaster scale than we now have them. I mean vaccination and immunization for every man, woman and child, as well as regular physical examination for early diagnosis of diseases such as tuberculosis and cancer. All this and more is provided and must be expanded by a combination of public and private contributions.
>
> "This is a large order—and some shortsighted people will say we can't afford it. But I believe that there is within the medical profession itself a large element farsighted enough to realize that we can afford nothing less."

We agree with Mr. Taft that the realization of the objectives set forth by him is "a large order" and in some respects not practical. However, there is as he says a "farsighted" element within the medical profession which recognizes the need for better methods of providing medical care. The leadership of this group is already beginning to assert itself.

★

Medical Bureau's Contribution

MEDICAL BUREAU met its first real test during the recent epidemic of colds and mild influenza. As was to be expected, it did not function as efficiently as it would under normal conditions. That would have been an impossibility, for the calls literally poured in by the hundreds. However, the fact that it carried on as well as it did was gratifying to those responsible for its operation. Much credit is due the operators employed by the BUREAU. Many of them put in exceedingly long hours without complaint. Some fell ill under the strain and their places were taken by the Society's regular office staff. On one Sunday night when the epidemic was at its height, there were three operators plus the Secretary of the Society handling calls. It really was an exceedingly difficult period for the BUREAU.

Most physicians who subscribe to the BUREAU are cognizant of the difficulties under which it was laboring and made allowances for deficiencies in the service. A few became impatient. The same was true of many people in Washington and nearby counties who turned to the BUREAU for assistance. On the whole satisfaction was expressed with the BUREAU'S operation under severe stress, several physicians commending the BUREAU most highly.

This is an opportune time to express the appreciation of the Medical Society to the United States Public Health Service which for several months has detailed workers to assist with the operation of MEDICAL BUREAU. Their duties have been to provide information about physicians and medical institutions. This help came at a time when it was greatly needed.

It has long been recognized that the BUREAU'S quarters are inadequate for the staff. This was emphasized during the recent epidemic. Efforts are now being made to secure accommodations which will improve the working conditions for the operators considerably.

★

Vote for Physicians in the Services

Ballots will go forward to our members in the armed forces in March following nominations for offices in the Medical Society for the coming year. The Society's Executive Board has approved plans for these physicians to vote by mail for the first time.

Medical officers from Washington are stationed in all parts of the world. No matter how remote their assignments, there will be ample time for them to return their ballots, for the election will not take place until the Annual Business Meeting in May. In fact many of them will undoubtedly find it possible to vote for the Nominating Committee early in the year. These ballots will be sent to them in January.

Officials of the Medical Society have expressed themselves as being most anxious that members in the services feel that distance is no barrier to their participation in Society affairs. Not only are they being asked to express their preference for officers but their opinions on matters of policy are also being sought. For example, in his last letter to the members in the services the Secretary of the Society inquired about their views on postgraduate courses for physicians returning to civilian practice after the war and the reëstablishment of their practices when they return home.

★

Public Asked to Share Nurses

Before many months pass, the serious shortage of private duty nurses in the District of Columbia will be further aggravated, for more nurses are being sought by the armed forces. The question arises, what can be done to assure the civilian population of at least the minimum nursing service needed?

At its meeting on November 22, the Executive Board of the Medical Society approved the group nursing plan adopted by the Graduate Nurses' Association. The plan in its essentials is one where patients, upon the recommendation of their physicians, and with their approval, share nurses' services in hospitals.

The following recommendations have been accepted by the Graduate Nurses' Association:

That group nursing be established in all hospitals in the District.

That only those nurses who signify their willingness to accept that type of service be called for group nursing.

That, as far as possible, group nursing be used for 8-hour duty only.

That nurses be assigned to not more than three patients for 8-hour duty.

That, if nurses accept 12-hour duty, they be assigned to two patients only.

That the salary for group nursing shall be:

8-hour duty:
  For two patients, $4.00 per patient—Total $8.00
  For three patients, $3.00 per patient—Total $9.00
12-hour duty:
  For two patients, $6.00 per patient—Total $12.00.

That nurses still be responsible for collecting their salaries.

The same group endorsed the following policies:

Patients requesting group nursing be placed either in the same room or in nearby rooms.

No nurse be asked to accept more than 12-hour duty.

The cost of one meal per day for 8-hour duty nurses and two meals per day for 12-hour duty nurses be divided among the patients.

Charges: The charge for one-half day or any portion thereof will be for one-half day. The charge for overtime $.50 an hour each patient.

If after caring for two patients "group nursing" one patient is discharged and no other patient is admitted for group nursing care, the charge for the remaining patient will be the full rate for *one* patient, $6.00.

★

Restrictions on Health Travel

A bad case of jitters or that tired feeling does not justify travel by automobile to a more favorable climate in wartime. Mr. Robert E. Thompson, District Director of the O.P.A., makes this clear in the following communication addressed to the Secretary of the Medical Society:

Washington, D. C., November 19, 1943.

Mr. Theodore Wiprud
District of Columbia Medical Society
Washington, D. C.

My dear Mr. Wiprud:

As colder weather approaches, the local War Price and Rationing Boards in the District of Columbia are having many requests for special rations of gasoline for travel to a more favorable climate. Provided there is no adequate alternative means of transportation, a special ration may be issued to obtain medical attention or therapeutic treatment, including the transportation of a patient from the place where he has obtained medical attention or therapeutic treatment to his home. However, travel to a more favorable climate for purposes of health is not driving to obtain necessary therapeutic treatment within the meaning of the above section.

Until recently, denial of special rations for travel to winter and summer resort areas has rested upon grounds of gasoline and tire conservation. An additional reason for discouraging travel to these areas was revealed in a letter received a few days ago from Secretary of War Stimson and acting Secretary of the Navy Forrestal. This letter calls attention to the fact that many areas in the states of Louisiana, Mississippi, Georgia, Alabama and Florida are the sites of substantial military and naval establishments. In these areas housing conditions are extremely congested and community services, including public transportation facilities, sanitation systems, laundries and food distribution organizations, are badly over-burdened. An influx of transients and seasonal visitors would greatly aggravate existing problems and would directly interfere with the prosecution of the war. Accordingly, the War and Navy Departments have requested strict application of present policy against issuing rations for seasonal, non-occupational changes of residence.

Many of the applications we receive include a certificate from a physician, stating the trip is necessary to the health of the patient. We would appreciate it if you would advise the members of the Medical Society that we are in no way questioning their integrity, but the decisions of the local boards are based on the regulations which prohibit the issuance of such rations as quoted above. Anything that can be done to discourage such seasonal travel will be a great help to us.

Yours very truly,
Robert K. Thompson
District Director, Office of Price Administration, Executive Offices

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Physicians' Incomes

If your Observer's memory serves him right, the accuracy of surveys of physicians' incomes has frequently been a source of controversy. Oftener than not, their reliability is challenged. Recently figures were released which resulted in the following protest by the *Journal of the American Medical Association* in its issue for November 20:

"The U. S. Department of Commerce recently issued a release on the incomes of physicians of which the following sentence has been widely published and discussed: 'The average gross income reported for 1941 was $8,524, and the average net income $5,047.' Analysis of the methods by which these figures were obtained reveals that they are little more than guesses. The full report of the study on which they are based is printed in the 'Survey of Current Business,' issued by the Bureau of Foreign and Domestic Commerce of the U. S. Department of Commerce, October 1943, pages 16 to 20. From this we learn that 'questionnaires were sent to a representative sample of physicians who were requested to give information relating to gross and net incomes, costs of practice, age, type of practice, employees, pay rolls and other selected items during the period from 1936 through 1941.' A total of 1,898 returned questionnaires were used, about 1 per cent of the 180,496 physicians reported in the American Medical Directory for 1942, when the survey was made. One hundred of these questionnaires from the Southwest were excluded because of 'a strong bias . . . in the sample from Texas.' For apparently the same reason the returns from Illinois, Indiana and Michigan were not included. There is no explanation of the method by which the sample was selected or any proof that it was representative. It is admitted that there were 'special difficulties arising from the impracticability of obtaining a full representation of those of the younger doctors who were withdrawn from independent practice into the armed forces prior to the summer of 1942,' but this is purported to have been allowed for by 'weighting.' In the summary table, returns from only twenty-one states are listed. Among those omitted, in addition to those previously mentioned, are Florida, North Carolina, South Carolina, Tennessee, Minnesota, Missouri and Wisconsin. On this very small foundation, nevertheless, is built an inverted pyramid of deductions, conclusions, diagrams and classifications based on income by age, localities, size of city and gradation of income, all given to the final dollar or to a decimal fraction, which gives a semblance of accuracy which the foundation of facts is entirely too slight to support."

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Dr. Bocock's Resignation The day on which Dr. Edgar A. Bocock resigned as Superintendent of Gallinger Hospital (December 16), the following editorial appeared in the *Evening Star* of Washington, D. C.:

"By adopting as 'findings of fact' the conclusions of its subcommittee which investigated Gallinger Hospital, the Senate District Committee has destroyed whatever value might lie in Dr. Edgar A. Bocock's continued service there as superintendent.

"This has nothing to do with the value of Dr. Bocock's past services to the hospital and to the community, which began sixteen years ago today. That stands for itself and cannot be destroyed. He was largely instrumental in developing Gallinger from the 'Alms' house', which he found when he came here, into the excellent municipal hospital which it is today, only recently able to acquire the solid foundations on which to build its future growth.

"This failure to take into consideration Dr. Bocock's real achievements in the recommendation for his dismissal now is as out of focus and as ill considered as the 'findings of fact' on which the recommendation is based. He happens to be the logical victim, and no doubt he will have to pay the price. But to those who have made an effort to weigh the nature of the damaging evidence against him and his hospital as against the evidence in their favor which was discarded, or belittled, it is impossible to escape the conviction that the findings of the investigators are exaggerated and the recommendations are unjust.

"The Gallinger investigation was authorized by a Senate resolution which, as amended, provided that the committee, or sub-committee 'shall call upon the United States Public Health Service for such professional, technical or other assistance as it may deem necessary for the purpose of the investigation.' But the commendatory testimony of the Public Health Service Assistant Surgeon General was ignored in the report; the testimony of a Government hospital expert was ignored; the testimony of distinguished surgeons and doctors who practice at Gallinger was never sought. As a whole, the 'findings of fact' were in themselves contradictory to the testimony of these experts.

"The results of the investigation do not win confidence of those sincerely interested in Gallinger. The recommendation for Dr. Bocock's discharge is a cynical commentary on reward for successful public service. But they obviously have denied any opportunity for Dr. Bocock to continue his services as superintendent with any hope of benefiting the hospital. The job now becomes one of reconstruction."

War Section

EDUCATIONAL PROGRAM FOR MEDICAL OFFICERS

James Alexander Lyon, M.D.

Chairman, Regional Zone Number Five, Wartime Graduate Medical Meetings

In March of this year the American Medical Association, the American College of Surgeons and the American College of Physicians organized and provided funds for a series of Wartime Graduate Medical Meetings* to be held in Army, Navy and Public Health hospitals. The undertaking received the full support of Surgeons General Magee, McIntire and Parran.

The primary purpose of this educational program is the instruction of medical officers in service hospitals. Instructors include medical officers and physicians in the locality of these institutions, each of which is located in a designated zone. In Zone 5, for example, services are being contributed by the medical staffs of service hospitals in the vicinity of Washington and the teaching staffs of institutions such as Johns Hopkins, the University of Maryland, the University of Virginia, the Medical College of Virginia, Georgetown and George Washington Medical Schools.

Zone committees are responsible for the details of the programs at each service hospital, for the selection of speakers, arrangement of time of their appearance and schedules for traveling within their respective territories. They are also required to furnish copies of programs to the Commanding Officer of each hospital. Expenses, which are limited to necessary traveling costs, must be approved by the committees. Following the presentation of programs, Commanding Medical Officers are asked to give their impressions and those of their staffs in writing.

During the period from October 4, 1943 to February 18, 1944, lectures, demonstrations and panel discussions will have been presented at eight Army and three Navy hospitals in Zone 5.

There are approximately 800 medical officers attached to the 11 hospitals in which the meetings were held. Over 98 instructors lectured for 91 two-hour periods on various phases of medicine and surgery, including some 30 subjects.

Officers numbering less than 35 in any military establishment attended lectures in larger hospitals in their area. Walter Reed General Hospital and the United States Naval Hospital in Bethesda, Maryland, did not participate.

The following is a sample of a form letter which was mailed to selected instructors upon receipt of a request from a hospital.

Washington, D. C.

Captain John M. Schmoele, M.C., U.S.N.R.
Norfolk Naval Hospital,
Portsmouth, Virginia.

Dear Captain Schmoele:

In response to a request from:

The Commanding Officer, Station Hospital, Langley Field, Virginia

Our Committee will appreciate it very much if you will contribute to this request as follows:

Subject: "Prevention and Treatment of Wound Infections with Sulfonamides." (Demonstration, lantern slides)

The lecture to be given from:

Three to five p.m., Wednesday, 3rd November, 1943. (38 Medical Officers attached to the hospital)

An extra copy of this form is enclosed for your convenience, asking that you make comments and return it to me within the next few days.

Upon completion of your instruction, please submit an expense account to me in duplicate so that you may be reimbursed for personal expenses involved in your travels.

Very sincerely yours,
Chairman

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* See M. Ann. District of Columbia, 1943, 12, 244.

Comments made by lecturer:

Pleased to complete above request. Will present personal experience with the use of Sulfonamides based on a series of 1500 war casualties at U. S. Naval Base No. 2 in the South Pacific from May 1942 to May 1943. These casualties were from the Guadalcanal area.

/s/ JOHN M. SCHMOELE
Captain (MC) USNR
Chief of Surgery

NURSES NEEDED FOR THE ARMED FORCES

The American Red Cross Recruitment Committee has the responsibility of securing nursing personnel for the armed forces.

Locally the District Procurement and Assignment Committee for Nurses of the War Manpower Commission determines the essentiality of nurses and classifies them accordingly. Nurses classified as available for military service are referred to the District of Columbia Nurse Recruitment Committee for follow-up with a view to military assignment.

With the District of Columbia trailing the Nation in the percentage of eligible nurses assigned, we are calling on physicians for assistance in this vital war effort. In war as in peace the nurse consults the physician on personal and professional problems because she has learned to respect his opinion and act upon his advice. Therefore, no one is better qualified than he to interpret the needs of the military and to disseminate adequate and accurate information relative to these needs.

Unlike our service men, all nurses entering military service enjoy rank, benefits and privileges of officers. War service offers experiences, responsibilities and opportunities which strengthen nurses individually and the profession as a whole.

Our obligation to the military, at home and abroad, is inescapable. War demands nurses in great numbers and our fighting forces must receive adequate care. War does not wait. It demands radical changes with little time for deliberation, thus the seriousness of the deficit in the number of nurses in the armed forces must not be underestimated.

You can help by urging graduate nurses married or single under 45 years of age, who qualify, to volunteer for military service; by interpreting the needs of the military to patients who may expect "nursing as usual"; by encouraging inactive nurses to return to nursing and release an eligible nurse for service; and by supporting the Nurses Aide and Home Nursing programs in order to help civilian needs.

Will you do one more thing to help win this war? Will each one of you urge one or more eligible, available nurses to enter service?

By June 1944 the ranks of the Army Nurse Corps alone must be 51,000 strong!!

DISTRICT OF COLUMBIA RECRUITMENT COMMITTEE, AMERICAN RED CROSS

CALENDAR OF MEETINGS

December 2	Section on Pediatrics Subcommittee on Mental Health
December 8	Scientific Meeting of Society
December 14	War Bond Drive Committee
December 15	Scientific Meeting of Society
December 16	Section on Neurology and Psychiatry
December 18	Section on Pathology and Laboratory Medicine
December 21	Public Health Committee
December 27	Executive Board

MEETINGS

Wednesday, February 9

The Washington Urological Society will sponsor the following program: "Management of Carcinoma of the Bladder including Papillomatosis,"

THOMAS J. KIRWIN, M.D., F.A.C.S., Associate Professor of Urology, Brady Urological Institute of New York Hospital.

Wednesday, February 23

The Section on Gastroenterology will present the program. Speakers and titles of papers will be announced.

On The Home Front

The 18th Annual Meeting of the National Conference on Medical Service will be held February 13 in the Red Lacquer Room of the Palmer House, Chicago, on the day preceding the **Annual Congress on Medical Education and Licensure.** The program this year will stress the postwar problems and responsibilities of organized medicine, especially those relating to the reëstablishment of thousands of medical officers returning from military service, and a constructive national program for the improvement and better distribution of medical services to the American people.

President Roosevelt has appointed a **Medical Draft Board** of five physicians to investigate and report on medical requirements for entry into the armed services. The members are Rear Admiral Ross T. McIntire, Surgeon General of the Navy; Major General Norman T. Kirk, Surgeon General of the Army; Dr. Alan C. Woods, Johns Hopkins Hospital; Dr. Frank H. Lahey, Director, Lahey Clinic, Boston, and Dr. Edward A. Strecker, Professor of Psychiatry, University of Pennsylvania.

The American Board of Ophthalmology announces its new address as P. O. Box 1940, Portland 2, Maine. The 1944 examinations will be held in New York City, June 3 and 4, and in Chicago, October 5, 6 and 7.

The following initiates from the District of Columbia have been accepted into Fellowship in the **American College of Surgeons** in 1943: Drs. George J. Ellis, Vincent B. Hungerford, Richard L. Jackson, Arthur J. Mourot and John L. Parks.

The Washington Medical and Surgical Society held a dinner meeting at the Statler Hotel, December 27. "Evaluation of Cardiac Pain" was the subject of a paper presented by Dr. James Alexander Lyon.

The following officers are serving during the current year: Dr. Edward M. Pickford, *President*; Dr. E. Leonard Goodman, *Secretary*; Dr. Frank E. Gibson, *Treasurer*.

The Clinico-Pathological Society met December 7 at the home of Dr. Daniel B. Moffett. Lt. Comdr. A. M. Hutter, M.C., U.S.N.R., spoke on "The Clinical Use of Penicillin."

The Washington Ophthalmological Society met in the Medical Society's building, January 10. Dr. Maynard C. Wheeler of New York City read a paper on "Surgical Treatment of Vertical Deviations." Case presentations were made by Drs. Sterling Bockoven, Frank D. Costenbader and C. Robert Naples.

The Honorable Walter S. Maclay, M.D., O.B.E., Superintendent of the Mill Hill Emergency Hospital, London, addressed the staff of **St. Elizabeths Hospital,** December 30, on the topic, "The Care of Neuroses in Military and Civilian Patients in England." Dr. Maclay has recently made an extended tour throughout the United States under the auspices of the American Psychiatric Association, during which he visited many psychiatric centers, medical schools and hospitals.

The Army Medical School, located at the Army Medical Center, Walter Reed Hospital, marked its fiftieth anniversary, December 18, when the sixteenth class to be graduated in military and tropical medicine since August, 1941 received certificates. Major General Norman T. Kirk, Surgeon General of the Army, addressed the class of 124 officers. Colonel G. R. Callender, Director of the School, presided. Honors were conferred upon Colonel Deane C. Howard, M.C., U.S.A. (retired), who ranked first in the initial class to be graduated in 1893. Colonel Howard was Chief of the Division of Sanitation in the Office of the Surgeon General during World War I. He holds the Distinguished Service Medal.

According to press reports, the **Lake County Medical Society of Indiana** has filed incorporation papers for a new organization, **the Association of American Physicians and Surgeons.** The announcement was made by Mr. Rollen W. Waterson, Executive Secretary of the Society, December 29.

Physicians are requested to urge nurses in their offices to return their survey cards immediately to the **Committee on Nursing of the Procurement and Assignment Service,** 1746 K Street, N.W., Washington 6, D. C.

Dr. Edgar A. Bocock resigned his position as Superintendent of Gallinger Municipal Hospital, December 16, 1943, after exactly 16 years' service. **Dr. Daniel L. Seckinger** is Acting Superintendent until a successor is secured.

Captain Don S. Knowlton, M.C., U.S.N., related some of his personal experiences before the annual meeting of the Milwaukee County Medical Society, December 9. The subject of his talk was "Medical Men on Guadalcanal."

Lt. Comdr. Henry Monat, M.C., U.S.N.R., has been elected Foreign Member of the Nutrition Society of Great Britain.

Among visitors at the Society's office during the Christmas Season were **Comdr. Henry A. Monat, M.C., U.S.N.R., and Lt. Comdr. John R. Cavanagh, M.C., U.S.N.R.,** just back from active duty in the South Pacific. Comdr. Cavanagh is now stationed at the U. S. Naval Hospital, Philadelphia.

Dr. James P. Leake, Medical Director, U. S. Public Health Service, discussed medical aspects of the war at the weekly luncheon meeting of the Harvard Club, December 4.

(*Continued from page 29*)

learned in military medicine, and will be advancing in the art and science of administration as well as in professional services to the patient. Now there is a strong and encouraging tendency to professionalize hospital administration, and the acute wartime problems have had something to do with revealing the need for able, specially trained administrative personnel, thus stimulating appreciation of the importance of using great care in the choice of the head of a hospital.

It is highly desirable that everyone working in and with hospitals coöperate with the administrator in maintaining acceptable standards of service during the emergency, both as an immediate aid to the war effort, and to assure that our institutions are ready to capitalize to the utmost upon the opportunities they will have for progress after the war, when materials and manpower will again be abundant. Administrative problems are not something that can be left entirely to the one man who administers a hospital; he needs everybody's help to keep it operating with the best results for patients, and especially is this true in these days of extreme pressure when practically the whole world is involved in war.

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *February, 1944* NUMBER 2

PLASTIC SURGERY IN COMBAT AND CIVILIAN CASUALTIES*

ROBERT H. IVY, M.D., F.A.C.S.
Professor of Maxillo-Facial Surgery, University of Pennsylvania School of Medicine

THE role played by plastic surgery in combat and civilian casualties lies chiefly in the later reconstructive phases. Yet there are considerations in the proper early care of certain cases which have an important bearing on the final outcome. The term "plastic surgery" as popularly understood implies the alteration for purely cosmetic reasons certain unpleasing God-given features. While there may be occasions when such alterations are justifiable, under a broader view plastic surgery denotes a branch of surgery in which the shifting or readjustment of tissues is undertaken for the treatment of congenital or acquired deformities not only of the face but of all parts of the body for the improvement of function, comfort, appearance and contour.

I will endeavor to point out some fundamentals in early care of certain types of injuries which, if properly carried out, will many times obviate the necessity for later plastic surgery procedures, or at least simplify the problems of final reconstruction. It may sound elementary to start with the simplest form of incised or lacerated wound which is seen in the accident ward of the hospital or in the doctor's office and to call attention to several things that are frequently done and others left undone by the person who first undertakes the early care, so that later revision becomes necessary. The hasty suture of such wounds on exposed parts of the body, such as the face, without removal of all particles of dirt may result in healing with ugly discolored scars. All bits of cinder and other particles lying in or ground into the tissues should be carefully picked out or excised if necessary. Another point is in connection with suture material. Many times in the closure of a cut on the face very coarse, deep sutures including the skin and deeper tissues have been placed with a heavy needle. These later leave broad scars across the original line of incision that are almost impossible to eliminate by later operation. In closure of these wounds about the face reliance for coaptation should depend chiefly upon buried subcutaneous sutures of fine catgut, and the skin edges should then be brought together evenly with very fine sutures of horsehair or silk, the tension having first been taken off by the subcutaneous sutures. Care should be exercised in placing the sutures to avoid overlapping of the skin edges and that the two edges come together on the same level. Attention to apparently small details such as these will go far to avoid the necessity for later operative correction.

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* Read at the Fifteenth Annual Scientific Assembly of the Society, September 30, 1943.

In deeper wounds of the facial region resulting from crushing injuries, gunshot wounds, etc., in which comminution of the underlying bones is present in addition to extensive injury to the soft tissues, there are certain fundamentals in early treatment that have an important bearing on the outcome. One of the most important is the provision of adequate respiratory airway. In the application of a pack to such a wound for the control of hemorrhage, care must be taken to apply it in such a way that it will not increase any respiratory difficulty inherent in the nature of the wound itself. A bandage that exerts too much backward pressure on the chin will increase respiratory difficulty and unduly displace mandibular fragments. For this reason the usual Barton bandage with turns passing around the front of the chin is unsatisfactory for these cases. Loss of bone and muscle attachment frequently results in loss of control of the tongue, menacing free respiration. This danger is best opposed by the use of a long suture through the tip of the tongue and drawing the latter forward by attachment of the suture to the dressing or the clothing. If a needle and suture are not available, the tip of the tongue may be transfixed with a large safety pin and held forward in the same way. Suction, if available, should be used frequently to keep the air passages free of secretions. Early reduction and fixation of mandibular fragments is very desirable in the avoidance of future deformity, the aim being restoration of the original occlusion of the teeth, or restoration of the function of mastication, even in those cases in which a considerable amount of bone has been lost. In order to minimize infection, early cleansing of the wound is important. Tooth fragments, foreign matter, completely detached particles of bone, and so forth, should be removed, but overenthusiastic débridement should be avoided. Bone fragments which have any attachment to the soft tissues should not be taken away but should be allowed to remain, as they frequently keep their vitality and aid in forming a framework for restoration of continuity. It is much wiser to be conservative and leave a bone fragment of doubtful vitality, removing it later in case of necrosis, than to perform a radical primary removal of all loose pieces of bone, because the resultant defects may require bone grafting later. Early stabilization of bone fragments helps to reduce pain and shock, assists in the maintenance of a clear airway, and reduces the danger of recurrent hemorrhage. Temporary fixation of fragments is best accomplished by wire ligatures on the teeth. If the patient has reached a more or less permanent installation, fixation of the lower to the upper teeth can be carried out; but if unattended travel is likely, the fragments should be temporarily stabilized as well as possible by methods of bandaging, wiring across the line of fracture, etc. which allow the mouth to remain open, thus avoiding danger of strangulation from vomited material. In this connection external skeletal fixation of mandibular fractures may have a distinct place, at least as a temporary measure in giving adequate fixation of fragments and at the same time permitting opening of the mouth. Large soft tissue wounds should not be closed over collapsed bone fragments. If this is done, malunion with great future difficulty in reconstruction will result. After reduction and stabilization of bone fragments, and only then, may a partial closure of the soft tissues be attempted. If a large gaping wound is present, it is best not to try to close it but to cover exposed bone ends by suturing edges of skin and oral mucous membrane. This procedure will minimize infection of bone and soft tissues and will conserve tissue for future repair. One point of primary importance is never to close a wound that communicates with the lower jaw or with the floor of the mouth without providing adequate dependent drainage. It is not desirable or necessary in wounds of the face to carry out extensive débridement and excision of raw surfaces prior to closure, as is recommended before early primary suture of wounds of other parts of the body. The rich blood supply of the face permits ready healing without this procedure, and great damage to important structures, such as nerves, salivary ducts, etc. may be done thereby. All shreds of clearly devitalized soft tissue should of course be cut away before suture.

In spite of reports of the apparent inefficacy of the local use of sulfonamide powders in controlling wound infection, I believe that the local application of sulfanilamide or sulfathiazole in potentially infected wounds is of distinct help.

In these extensive wounds of the lower maxillofacial area lives may be saved by attention to such apparently minor details as the position of the patient in transportation. If these casualties cannot walk, they should be transported in a sitting position if possible. If he must lie down, such a patient should not be placed on his back, but in a prone position, which favors the elimination of vomitus, blood and secretions from the mouth and throat, thus keeping the airway clear. Neglect of this precaution has not infrequently been responsible for death from suffocation in transit.

Proper management of burns in the early stages will do much to simplify and facilitate later plastic procedures. Covering raw third degree areas with new skin as soon as infection is under control and the general condition permits will frequently result in preventing contracture and disfigurement and saving months of hospitalization. In this connection, it is regrettable to note the persistence of many surgeons in employing the so-called "pinch grafts" in cases of this kind. The ease of technic in their application and the large percentage of successful takes should not blind one to their great disadvantages, i.e., very poor cosmetic appearance and tendency to secondary contracture of the part grafted. The development by Blair, Barrett Brown, Padgett and other specialists in plastic surgery of means of supplying large sheets of skin has rendered inexcusable the application of pinch grafts except in cases where donor areas are insufficient for supplying razor or whole-thickness grafts. This reluctance on the part of some general surgeons to give up the use of pinch grafts when so much better results are possible from razor grafts is a strong argument for the early transfer of cases of this character to the plastic surgery specialist who is familiar with up-to-date technic. Sensational reports of the use of homografts for burned areas continue to appear from time to time in the public press. Authorities are in general agreement that, except in the case of identical twins, such skin grafts are only temporarily successful and almost invariably disappear in a few weeks. They may serve a useful purpose in temporarily covering raw surfaces while the patient's general condition is undergoing improvement, and where there are insufficient donor skin areas for providing autogenous grafts.

There are many other points in connection with early care of cases in relation to future plastic surgery to which attention might be called, but time will not permit.

In the later correction of deficiencies of surface and contour, new tissues are supplied in two ways, by means of flaps and by means of grafts. In the repair of a loss of surface, whether this can be best accomplished by a free skin graft or a pedicled flap depends on several factors, and considerable judgment may be required in order to obtain the best end results. For a superficial area involving only loss of the skin itself or very little of the underlying tissue, a free skin graft will usually suffice. For deeper losses, in which the scar tissue extends to tendon, muscle, nerves and bone, a skin graft alone applied over these structures as a rule does not give a satisfactory result. The deeper defects also require a thicker amount of covering tissue to build out contour. Hence, under such circumstances a pedicled flap of skin with its underlying fat tissue will be more suitable. Aside from this, cosmetic considerations in exposed parts of the body may have an influence in the choice of a pedicled flap as opposed to a free skin graft. Pedicled flaps have a rather high resistance to infection and undergo very little contraction after transfer. The skin is soft and pliable, and the color of the part from which the flap is taken is retained in the transplant. Free skin grafts, on the other hand, undergo considerable shrinkage, are not so soft and pliable, and the color is not usually as satisfactory as in the case of a pedicled flap. One great advantage in the use of free skin grafts as distinguished from pedicled flaps is the great saving of time. A pedicled flap requires at least 3 operations at intervals of 3 weeks for its completion, whereas the free grafting of a like area can usually be accomplished in 1 operation. In the selection of a donor area for a flap or a skin graft, due consideration must be given to the presence of hair. It obviously is undesirable to transfer hair-bearing skin to parts which are naturally not hairy. Hair follicles may inadvertently be transferred even with thin razor grafts, with undesirable later results. Under a grant from the Office of Scientific Research and Development, investigations are being carried out at the University of Pennsylvania in an endeavor to standardize the depilatory treatment of hair-bearing skin to be used in plastic repair by X-rays and other means. While the work has not yet progressed far enough to warrant any definite report, there is reason to hope that these investigations will bring out the possibility of safely preparing hitherto unsuitable sources of skin flaps and grafts for use in repair.

In spite of the excellent results in the repair of large surface losses by pedicled flaps and free skin grafts, the new surfaces seldom match in color and texture the surrounding normal skin. This fact has especially been dwelt upon by Ferris Smith, who advocates, whenever possible, the replacement of scar and pathologic skin lesions of exposed parts of the body such as the face by partial multiple excision and gradual introduction of normal skin from the vicinity by operations repeated at intervals, until eventually the entire defect is covered and a linear scar results. The surgeon should avail himself of the surrounding normal skin in repair whenever this is possible, reserving flaps and free grafts from a distance for cases in which local gradual advancement cannot be employed.

The restoration of contour defects when no loss of surface tissue exists, but when the deeper soft tissues, cartilage and bone are deficient, may be accomplished by the introduction of certain foreign materials, or by autogenous or homogenous grafts of various kinds. Among foreign materials, paraffin was formerly used extensively, but it should have no place in modern reconstructive surgery, since it is difficult to control in injection, may cause unsightly disfigurement, undergoes changes in shape, and has caused embolism and tumor formation. Celluloid, ivory and certain metals have all had their advocates. They have the advantage that they are easily inserted without mutilation of other parts of the body, but extrusion is possible at any time. At present, two metallic substances are rather extensively employed, viz., vitallium and tantalum, and surgeons report good results from both of these for certain purposes, such as filling skull defects.

As grafts for filling contour defects and replacing losses of supporting structures, the following tissues are used: (1) dermic grafts, (2) fat and fascia lata, (3) cartilage, and (4) bone.

The dermic graft, consisting of whole thickness skin from which the epidermic layer has been shaved off, is frequently used as a buried graft to build out comparatively shallow depressions, as in the bridge of the nose and the forehead.

Fat and fascia grafts may be used to build out depressions due to loss of soft tissue from various causes. Subcutaneous fat from the abdominal or gluteal region has been employed, but it has been found that the transplantation has been followed by a great deal of absorption of the fat. Fascia lata, with or without the overlying fat, has been found to yield much more permanent results, though even if this is used, over-correction is in order.

Costal cartilage is in my opinion by far the most suitable of all substances to build out contour loss due to defects of supporting structures of the face, especially the bridge of the nose, the external ear, the side of the lower jaw, the chin and the malar region. It is not difficult to obtain in the necessary amount, is easily trimmed to suitable size and shape, and rarely undergoes absorption when imbedded in soft tissues. While living autogenous costal cartilage is undoubtedly preferable to any other, in recent years many operators have successfully used preserved cartilage from other living individuals and even from cadavers. The use of preserved cartilage has the advantage that unlimited quantities are available and the patient does not have the inconvenience of a chest operation added to that of the part to be repaired. Costal cartilage thus obtained, after removal of the perichondrium, should be placed in aqueous merthiolate diluted with 3 parts physiologic saline solution, and will keep almost indefinitely in the refrigerator. It is believed, however, that living, autogenous costal cartilage is less likely to undergo absorption after transplantation than the preserved cartilage. Costal cartilage has a well-known tendency to change shape by curling after implantation, the result being an unsightly deformity. To overcome this, Gordon New exposes the cartilage after removal to live steam for a minute or two. This causes the maximum amount of curl to take place immediately, after which the cartilage can be trimmed to proper size and shape and no further curling will occur. Of course, the steaming destroys the vitality of the cartilage. Lyndon Peer has recently called attention to a method of preparing costal cartilage which is proving of value in certain cases. Instead of shaping one large piece of cartilage for insertion, he dices it or chops it up into fine pieces, and then packs the pieces into the pocket created by undermining the soft tissues. After a sufficient amount of the diced cartilage has been packed into the cavity, the incision is sutured and the overlying surface molded to shape by pressure. By this means it is possible to obtain smoother margins to the restoration, with a more gradual merging with the surrounding tissues. Costal cartilage does not form a firm union with bone, hence it cannot effect a stable restoration of continuity in a movable bone, such as the mandible.

Bone grafting is sometimes employed for repairing defects in the cranium and contour losses of various parts of the face, but its most frequent use is in restoring continuity and replacing losses of substance of the mandible. Where a large defect is present, especially with visible loss of contour, the most suitable source of the bone graft is undoubtedly the crest of the ilium. This furnishes a large piece of bone of porous structure closely resembling that of the mandible, it is easily penetrated by new vascular supply, and can readily be cut to suitable shape. The disability produced by removal of the graft is quite temporary and the danger negligible. The osteoperiosteal graft from the tibia is also sometimes used. This theoretically contains all of the elements necessary for osteogenesis, is flexible, and is easily adjustable to the size and shape of the defect. The technic of removal and insertion is simpler than that of the other method. It causes no disability in the leg. While this form of graft can be used for losses of substance of the mandible of almost any extent and any position, I usually reserve it for defects of 2 cm. or less, and in cases in which the external contour of the face shows little or no deficiency. It is also to be selected in children, because the crest of the ilium shows very little ossification before 15 or 16 years of age.

CONTINUOUS SODIUM PENTOTHAL IN CASES ASSOCIATED WITH SHOCK

BOSTON MEDICAL
NOV 13 1945
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CHARLES E. FIERST, M.D.
Major, Medical Corps, Army of the United States

THE application of intravenous anesthesia to varied surgical procedures has been in direct proportion to the experimental and clinical progress made during the past ten years. The first barbiturate to be administered intravenously was somnifen, a mixture of barbital and dial, and was introduced in 1924 in France by Fredit and Perlis; pernoston was introduced by Bumm in Germany in 1927; sodium amytal was introduced in this country in 1929, and nembutal in 1930; evipal was first used in Germany by Weise and Schapff in 1932, and pentothal sodium was introduced by Lundy and Tovell[1] in 1934 at the Mayo Clinic.

The recognized and most widely used intravenous agent at the present time is pentothal sodium, but its application until recently had been limited with few exceptions to minor surgical procedures of short duration, induction of general inhalation anesthesia, and supplemental-complemental role in local and spinal technics. The universal method of administration is the fractional or intermittent type, using solution concentrations of 5 or 2½ per cent, with or without oxygen or oxygen-nitrous oxide, as suggested by Lundy and his associates.[2]

It is my purpose to suggest that pentothal sodium can be used safely for major surgical and orthopedic procedures associated with shock necessitated by pathologic or traumatic etiology by a continuous method. I mention traumatic because of the great controversy regarding the use of pentothal sodium in patients who are in a shocked condition due to crushing wounds with considerable loss of soft tissue or fractures of the long bones. It has been my experience with such problems that if the patient is treated judiciously by the intravenous use of morphine sulphate and atropine sulphate, infusion of plasma, and the application of moderate external heat to the body, the anesthesia can be adequately handled, both from the viewpoint of the surgeon and the anesthetist by the continuous method of pentothal sodium with the administration of oxygen.

The patient in shock is under the influence of a natural protective mechanism, and it is the responsibility of his benefactors to provide a speedy and adequate approach to the normal. This approach necessitates the immediate relief of reflex activators and anoxia, replacement of blood components, and a rapid, pleasant descent to, and maintenance of, the unconscious state by an agent with the least disturbing influence on the physiologic status for the repair of injured tissue.

The efficiency of the intravenous use of morphine, oxygen and plasma is a well established fact, and atropine sulphate minimizes the possibility of laryngospasm during the administration of the drug and provides a dry air passageway.

The status of sodium ethyl(1 methyl-butyl) thiobarbiturate as an anesthetic agent in major surgical procedures, especially with associated shock, has been avoided by some of the prominent clinicians. Reviewing the literature, Pratt et al,[3] Ruth,[4] Beecher and Moyer,[5] and others advise its use only for short operations not requiring marked muscular relaxation. However, Carraway,[6] Thomas,[7] Tucker,[8] Kassebohm and Schreiber.[9] French,[10] Rose,[11] Adams and Gray,[12] and others have doubted many of the so-called contraindications to its use. Rose has very recently reported its applicability in the war zone, while Adams and Gray have reported the case of a gaping gunshot wound in the left side of the thorax, comminuted fractures of the sixth to the ninth ribs, exposure of the spleen and a portion of the stomach with a 20 cm. laceration in the diaphragm. Splenectomy was performed. The entire procedure lasted an hour and a half and was done under 2.5 per cent pentothal sodium anesthesia with N_2 O–O_2 at 50 per cent concentration. They say "that pentothal sodium may be safely administered intravenously for anesthesia to patients who are in a state of shock from trauma, provided their low tolerance for this and similar drugs is recognized and administration is conducted accordingly. There was no evidence that the degree of shock was increased in any way by the anesthetic procedure."

In an attempt to use pentothal sodium in major surgical procedures I have administered it in all dilutions, using the intermittent technic; but I was not entirely satisfied as to the smoothness of operability, because during the interval of administration and detoxification the patient would often move or muscular tension increase, necessitating a pause in the operation until an adequate amount of anesthetic was given to reattain a surgical level. The initial attempt to overcome this was made by using a continuous gravity drip of pentothal sodium in 1 per cent solution (1 gram of pentothal sodium in 100 c.c. of water), preceded by heavy preoperative medication of pentobarbital sodium and morphine sulphate. The gravity drip was employed to stabilize the rate of administration to the rate of detoxification by the body, providing a smooth maintenance level. However, the heavy preoperative medications plus the addition of another respiratory depressant necessarily created the possibility of a serious complete depression of the medullary respiratory center and to a lesser degree the sino-aortic chemoreceptors. The addition of a 30 c.c. syringe containing a 5 or a 2½ per cent solution of the drug, connected to the gravity drip with a B. D. 3-way valve by the medium of semi-transparent latex tubing, supplied the essential element of a rapid smooth induction without heavy preoperative medication; the gravity drip of 1 per cent solution was the stabilizer.

When the rate of detoxification is greater than the rate of administration after the establishment of a satisfactory surgical level, its early recognition is possible by close observation of the respiratory rate and depth of excursions. When painful stimuli are breaking through the unconsciousness, the respiratory rate becomes faster and deeper, and an increase in the flow of gravity drip per minute, averaging 20 drops per minute, or the injection of 1 or 2 c.c. from the syringe will promptly remove the possibility of reflex motor activity resulting with interference to the surgical procedure or lowering of the status of the patient's general condition.

In considering a group of cases associated with varying degrees of shock lasting not less than an hour or more than 1 hour and 45 minutes, the following averages were computed: with an operating time 1 hour and 26 minutes the quantity of 1 per cent pentothal sodium consumed was 80 c.c. or 0.8 gram, whereas the quantity of 5 per cent pentothal sodium was 11.8 c.c. or 0.6 gram, giving a total per case of 1.4 grams. The average consumption of 1.4 grams is well within the lethal limits, but it must be remembered that traumatized patients with impending, moderate or severe shock require amounts of pentothal sodium in proportion to the degree of shock. To illustrate, a colored male, aged 26, with a height of 5′11½″ and a weight of 187 pounds, was brought to surgery following an automobile accident with the diagnosis of a compound, comminuted fracture of the right tibia-fibula in the lower one third. The patient was in severe pain and shock, presenting all of the cardinal symptoms of profuse sweating, cold clammy skin, weak rapid pulse at 120 per minute, with the systolic pressure 70 mm. Hg and the diastolic pressure 50 mm. Hg. The patient was given morphine sulphate intravenously until the pain

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was relieved, the total amount being 0.25 grain, and atropine sulphate, 0.01 grain. A perceptible decrease in generalized tension and lack of grimacing of the face was noted. A proper exposure of the body was made and plasma was started immediately (4:35 p.m.) intravenously. A total of 750 c.c. of plasma was given from 4:35 to 5:45 p.m., and at 6:25 p.m. 500 c.c. of citrated whole blood was added. Continuous pentothal sodium was started at 5:00 p.m., induction being produced with 2.5 per cent (total 20 c.c.) and maintained with 1 per cent solution (total 100 c.c.) for the anesthetic time of 1 hour and 20 minutes. The total dosage of the drug was 1.5 grams. The blood pressure was never below the initial level, nor the pulse above the recording at the time of admission to surgery; at 6:50 p.m. the systolic pressure was 110 mm. Hg and the diastolic pressure 70 mm. Hg, with a pulse rate of 100 per minute. The recovery time was 1 hour and 25 minutes and was not associated with nausea or mental excitability. It is interesting to note that oxygen was not administered in order that it might be ascertained whether the degree of anoxia would be increased by the administration of pentothal sodium. The medium of blood pressure, pulse, respiratory rate and muscular relaxation seemed to indicate in this particular case that it was not, probably because of the replacement of blood components and the continuous administration of $2\frac{1}{2}$ and 1 per cent solutions. However, this is not the accepted nor advised procedure in shocked patients, since anoxia is always present and should be treated promptly and completely with oxygen. The advantages of this technic are a smooth, rapid induction, with an equalized maintenance of the surgical level; widening of the scope of applicability by maintenance of the surgical level with continuous weak concentration plus 100 per cent oxygen to include surgical procedures associated with trauma and shock; diminution of the amount of pentothal sodium necessary as the length of operating time increases; the fact that the physical structure of the apparatus allows a rapid administration of intravenous medications as the case demands; elimination of the objection of blood clotting and obstruction of the needle by the continuous flow, and finally, in the hands of a trained anesthetist the accomplishment of administration of the drug and oxygen without an assistant. The disadvantages of this type of technic requiring the glass buret, Murphy drip and considerable tubing limits its use to hospital facilities; the drug is not applicable to the very young; the intermittent or continuous administration in major surgery and especially those cases associated with shock should not be attempted by inexperienced personnel, and finally, its selection as an anesthetic agent for surgery involving the mouth and throat should be given due consideration for the possibilities of hemorrhage and the maintenance of a patent airway.

The usual postoperative complications of nausea, vomiting and headache so characteristic of general inhalation anesthesia are also present with pentothal sodium, but in a much smaller degree. The severity and duration of these complications are much less than seen following the use of volatile and gaseous agents. Atelectasis occurred no more frequently than with other inhalation agents, because the patients have breathing exercises, hyperventilation with an O_2-CO_2 mixture, and are turned frequently, the operation and condition permitting. I have had 2 nearly fatal respiratory depressions in children aged 6 and 8 respectively; 1 case of pneumonia occurred following the administration of pentothal sodium, but recovery and convalescence were normal. Two cases of venous thrombosis occurred, both in female patients, 1 being severe but fortunately without sloughing at the site of injection. Finally, about 1 per cent of the patients develop hypermental excitability while reacting, characterized by loud, incoherent speech, and aimless thrashing of the legs and arms, and are entirely uncoöperative, often requiring restraint to prevent injury. This is fortunately not the usual reaction, since, like the induction, the regaining of consciousness is usually pleasant and not associated with threatening dreams or made objectionable by nausea, vomiting or headache.

SUMMARY AND CONCLUSIONS

This report is based on the personal knowledge gained by the administration of 1,005 cases of intravenous pentothal sodium, in which major surgical procedures associated with various degrees of shock were accomplished successfully by the continuous technic, a review of the current literature on the use of intravenous anesthesia, and the conclusions of anesthetists in military and civil practice.

I believe the following to be true with the administration of continuous intravenous pentothal with oxygen:

1. A closer approach may be attained to the postulates of Seevers and Waters,[13] that is, first, a rapid, non-irritating induction free from unpleasant odor and a pleasant recovery period; second, a non-explosive agent providing adequate muscular relaxation; third, the anesthetist's desire of a wide margin of safety with minimal functional or organic injury and sufficient potency to allow high percentages of oxygen to be administered; and last, purification of the agent without difficulty and storage without fear of chemical change.
2. Surgical conditions associated with shock do not contraindicate the use of pentothal sodium in trained hands.
3. The maintenance of a dry patent airway at all times is an absolute necessity.
4. Inhalation of 100 per cent oxygen prevents serious complications and enhances muscular relaxation.
5. The pleasant reaction affords protection to the patient's general condition, to the freshly treated tissues, and to all mechanical appliances attached thereon.
6. Heavy sedation before the patient fully reacts is to be avoided.
7. Proper attendance of the patient postoperatively to avoid fatalities by asphyxia is necessary.

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Report gas gangrene treated successfully with penicillin. The successful treatment with penicillin of a case of gas gangrene is reported by W. B. McKnight, M.D.; Richard D. Loewenberg, M.D., and Virginia L. Wright, M.D., Portola, Calif., in *The Journal of the American Medical Association* for February 5, 1944. The authors say that it was recently stated that penicillin, experimentally, is a potent agent in gas bacillus infections, but up to that time there had been no studies on human cases.

The importance of the report is emphasized by the fact that although gas gangrene is a comparatively rare infection in civilian life, it is a serious menace in military operations. The mortality rate in civilian cases has been estimated at 49.7 per cent while the death rate from the infection in the American Expeditionary Forces in France in the last war was 48.52 per cent.

The three California physicians report that "We observed a severe gas infection in a 7-year-old girl. After all routine measures, including serums, sulfonamides and amputation, had failed, Dr. Chester Keefer [chairman of the committee of the Division of Medical Sciences of the National Research Council which has charge of the allocation of penicillin] provided us with penicillin in sufficient quantities to treat successfully the patient, whose outlook seemed hopeless. The isolation of our mountain hospital made it unprepared and unequipped to furnish exhaustive laboratory studies. The clinical significance of our observation, however, remains important enough to justify more investigations of this treatment."

The girl was found lying on the porch of her home with a fractured left forearm, in the middle of which was a bleeding puncture wound. It could not be determined how or when she had fallen. She was immediately taken to the hospital and sulfathiazole powder was sprinkled on the wound which was sterile dressed. Four days later gas gangrene had developed to the point where amputation was necessary but there continued to be little improvement. On the seventh day after the accident penicillin treatment was started and exactly one month after the accident the girl was sent home.

THE METHOD OF TREATMENT OF MENINGOCOCCAL MENINGITIS WITH SULFADIAZINE AND SULFAMERAZINE (SULFAMETHYLDIAZINE) AND THE RESULTS OBTAINED IN 140 CASES*†

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IN THE past several years numerous observers have attested to the value of the sulfonamide drugs in the treatment of meningococcal meningitis. Many of the more recent publications[1–10] have emphasized the success achieved by the use of one or another of these drugs in large groups of patients. They have laid stress on their efficacy in terms of mortality rates obtained. These have ranged from less than 1 per cent to approximately 10 per cent. As valuable as these reports may be in showing the usefulness of the sulfonamides, nevertheless, they do not offer much help in determining prognosis nor aid in the treatment of the individual patient.

This paper, therefore, will describe the routine of therapy which we feel will bring about the most satisfactory results in the treatment of any given patient. Secondly, by studying the results we have obtained using a similar régime in 140 patients we may demonstrate what success can be expected from this type of treatment in a group of civilian patients as regards outcome, duration and complications of illness. Moreover, we will indicate several factors that are important in the judgment of prognosis.

Before discussing details of treatment it is advisable to reëmphasize that proper diagnosis should include as much bacteriologic data as possible, such as taking of a blood culture before treatment is started and obtaining as soon as possible the group of meningococcus causing the infection. After having done the diagnostic procedures with as little delay as possible, therapy should be started with an adequate dosage of the sulfonamide chosen. At the present time because of their proven worth and low toxicity the drugs we prefer to use are either sulfadiazine or sulfamerazine. The mode of administration used by us for the first dose varies with the degree of illness of the patient. In general, most patients are sick enough to warrant the use of the sodium salts of these drugs intravenously, which will obtain almost immediately a satisfactory concentration of the drug in the blood stream. Some of the less ill patients can be treated adequately by using only oral medication. At the present time the accepted size of the initial dose is 6 grams of either drug. Following this initial dose, 1 gram every 4 hours seems to be the highest dosage needed. We feel that higher dosages than this are rarely, if ever, necessary. The maintenance doses in patients who are conscious should be given by mouth, unless vomiting is severe enough to prevent adequate retention of the drug. In comatose patients, we prefer to give the subsequent doses by stomach tube instead of parenterally because of the ease of administration and the fact that absorption is apt to be more constant and give more uniform blood levels. If, however, parenteral administration is indicated, especially if vomiting is severe, we feel that 3 or 4 grams as a 0.5 to 1 per cent solution in physiologic saline subcutaneously every 6 to 8 hours is preferable to intravenous administration since the blood levels so obtained are apt to be more constant.

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† Read before the Society, October 27, 1943.

Second in importance only to the specific therapy is the administration of ample fluids. These patients are usually quite dehydrated, especially if they have been vomiting any length of time, and they need at least 3,000 c.c. of fluid a day. If the patient can take fluids by mouth, or has a stomach tube inserted, there is no reason why this amount orally is not satisfactory. If, however, parenteral fluids are needed, they should be given.

Once therapy is started in a patient with meningitis, he should be followed closely clinically and by a few of the available laboratory tests. He should have a white blood cell count and hemoglobin determination every other day to guard against toxic effects from the drug. He should also have a daily urinalysis, since the sulfonamides in the doses recommended may cause renal calculi. The appearance of red blood cells and/or crystals in the urine may indicate when one of these is impending. In such a case fluid intake can be increased and perhaps drug dosage reduced, thereby averting more serious difficulty. The drug level determined daily during the first several days until it becomes stabilized and then every other day later on is extremely valuable, since, if the patient is doing poorly, or if he develops a renal calculus, it is well to know in advance whether increasing the dose may be valuable or decreasing it is advisable, as the case may be. Measurement of the total urinary output is a simple and an extremely valuable guide as to the renal status as well as a help in regulating fluid. If this decreases for some unexplained reason, renal damage from the drug should be suspected and fluid administration increased and perhaps drug therapy decreased as indicated. In these patients the frequent determination of the blood NPN level is also indicated, since it gives further evidence of early renal damage.

When to repeat a lumbar puncture is somewhat debatable. We feel that if the patient's clinical course is satisfactory, no repeat puncture is needed until after the drug is discontinued, and then it should be repeated at weekly intervals until the spinal fluid cell count is below 30 cells per cubic millimeter before the patient is considered cured. If, however, the patient is continuing to run a fever, continues to look ill, remains in coma 24 to 48 hours, shows signs of relapsing after an initial response, or develops some toxic reaction to the drug which may require a change in method of therapy, a repeat spinal tap is immediately indicated to reëvaluate his status from a laboratory point of view and to correlate this with the clinical condition in order to have a sound basis for further therapy. Of most importance in this second sample of fluid is the determination of the number of organisms and the quantitative sugar as compared to the original fluid. If the former are decreasing and the latter is increasing, the response is favorable from a laboratory point of view. One other indication for an earlier tap is persistent, severe headache in spite of clinical improvement, since this is often relieved by the procedure.

If the patient is not doing well clinically and the spinal fluid indicates little or no improvement, he must in the light of available knowledge be considered a candidate for serum therapy in addition to sulfonamides. Furthermore, if the drug level is low in a patient who is not responding to treatment, efforts must be made to increase it by increased oral or parenteral dosage. It is essential to determine the type of organism if possible before using serum, so that a lot potent against the specific organism can be used. The initial dose of serum is approximately 100 c.c.

intravenously, repeated as indicated by the response. We do not feel that intrathecal administration of serum is justified or necessary.

Several other supplemental therapies may be used. One of these is sodium bicarbonate given to alkalinize the urine in an effort to decrease renal complications of the drug. If this is done, the pH of the urine should be determined and kept about 7.5. Sedatives even including morphine may be used with caution for headache and restlessness.

The duration of therapy is somewhat debatable; we feel that the drug may safely be stopped after 7 essentially afebrile days.

TABLE 1

Results of Treatment of 140 Meningococcal Meningitis Patients with Sulfadiazine or Sulfamerazine

	SULFADIAZINE	SULFAMERAZINE	TOTAL
No. treated	105	35	140
Died			
No.	13	2	15
Per cent	12.4	5.7	10.7
Average duration of temperature (days)	3.0	2.2	2.8
Average duration pleocytosis	21.6	23.2	21.9

Using this régime in 140 cases we have obtained data which give us an opportunity to indicate what may be expected in treatment of the civilian population and in the individual patient. As seen in table 1, 140 patients have been treated and 15 deaths (10.7 per cent) have occurred. Furthermore, it can be seen that while the mortality rate for sulfamerazine-treated patients is lower than for the sulfadiazine-treated patients, the difference is not great and is probably of no significance. This opinion is reinforced when we consider that in a controlled study the mortality rate obtained by using the two drugs was identical.[11] Also, sulfamerazine has not yet been used during any winter months, whereas the sulfadiazine figures have been accumulated over several years.

In estimating morbidity of patients who recovered, two figures are of value. The duration of elevation of temperature arbitrarily taken above 101°F. rectally or 100°F. orally will usually indicate the duration of the severest part of the illness. The second measurement is the number of days during which the spinal fluid cell counts remain above 30 cells per cubic millimeter. Since we used this level as a criterion for discharge, this is our most accurate measurement of duration of illness. We have not had a recurrence in any patient in whom the cell count has reached this level. Referring again to table 1, it is seen that the average duration of temperature in patients treated with sulfadiazine was 3 days and with sulfamerazine was 2.2 days and the average for the whole group was 2.8 days. The average duration of pleocytosis over 30 cells per cubic millimeter in the sulfamerazine group was 23.2 days, in the sulfadiazine group, 21.6 days, and in the total 140 patients, 21.9 days.

Having found the mortality rate and usual recovery time, we must consider the ultimate outcome of the patients who recover. We have had 23 patients who developed one or more cranial nerve palsies, but in only 9 patients have these persisted to the present time. Six of these patients developed deafness, which is, therefore, our chief untoward complication. We have also had a few patients who had purulent arthritis and tenosynovitis as a complication of their infection. These promptly subsided without residual effect during sulfonamide therapy.

Having considered the results that can be obtained in a group of patients it is now of importance to find which factors are of most significance in estimating the prognosis of the individual case as seen by the practitioner. Table 2 shows that the most important factors as well as the easiest facts to obtain are the age of the patients and the presence of coma. In our group we have had no deaths among 18 patients under 10 years of age. We have, however, had only 5 patients under 18 months of age. In the group of 83 patients from 10 to 39 years of age, we have had 10 deaths (7.2 per cent). On the other hand, in the older age group, i.e., 40 years or over, we have had a mortality rate of 23.1 per cent (9 deaths in 39 cases). In other words, anyone over 40 years of age has more than twice the chance of dying than does a patient under this age. We have too little data to speculate on the outcome in infants, but to the present time we have had extremely good results.

TABLE 2

Factors Influencing Prognosis in Meningitis Cases Treated with Sulfadiazine and Sulfamerazine

FACTOR	AGE GROUP	NUMBER	DIED	
			Number	Per cent
Age	Under 10 years	18	0	0
	10 to 37 years	83	6	7.2
	40 years and over	39	9	23.1
Incidence of coma on admission	Present	47	14	29.9
	Absent	93	1	1.1
Number of organisms in initial spinal fluid	Many	51	11	21.2
	Few	68	4	5.9
	None	17	0	0
	Not recorded	4	0	0
Initial spinal fluid dextrose	Under 10 mg.	49	8	16.3
	10 to 49.9 mg.	43	1	2.3
	50 mg. plus	10	1	10
	Not done	38	5	—

The presence of coma on admission is of the utmost importance. Of 47 patients admitted in coma, 14 died, whereas among 93 patients not in coma on admission only 1 died, and this patient had an overwhelming meningococcemia and Waterhouse-Friderichsen syndrome. This is of utmost practical importance, since it emphasizes the necessity of diagnosis before coma has begun.

Two determinations easily performed on the initial spinal fluid have been found to be helpful in estimating the prognosis. The number of organisms in the spinal fluid is roughly proportional to the outcome, i.e., the more organisms present, the worse the outcome is likely to be. The spinal fluid dextrose level is inversely proportional to the mortality. The lower the sugar level, the greater the likelihood of death. These results are also found in table 2.

In further analysis of our data, we have found also that rapidity of recovery depends on the same factors which influence the outcome.[2]

Another question of importance is: Can we expect favorable results to continue in the treatment of meningitis with these drugs this winter? From our data we have shown that up to June 30, 1943, there has been a rather constant mortality rate, and although there is a slightly higher rate since that time we feel it is not yet a significant trend. Therefore, at the present time, we can say that there is no evidence to support the contention that there will be any marked increase in meningitis mortality rates during the present epidemic.

In summary, the following conclusions are reached.

1. The sheet anchor of treatment of meningococcal meningitis is therapy with adequate doses of sulfadiazine or sulfamerazine, which seem equally effective.

2. Supplemental therapy, including well chosen laboratory examinations, fluids as indicated, lumbar puncture if needed, and serum in a limited number of cases, is important.

3. With the therapy outlined 140 cases of meningococcal meningitis have been treated with 15 deaths (10.7 per cent). The average duration of fever was 2.8 days, and the average duration of pleocytosis spinalis over 30 cells per cubic millimeter was 21.9 days. Nerve palsies have persisted in 9 cases, 6 of whom are deaf.

4. Age and the presence or absence of coma are two of the most important clinical factors in determining prognosis, whereas the number of organisms and level of sugar in the spinal fluid are the laboratory tests of most value.

5. Our evidence favors the opinion that the sulfonamides will continue to keep the mortality rate low throughout the remainder of the epidemic.

(*Continued on page 88*)

FRONTIERS OF MULTIPLE SCLEROSIS* †

II. Treatment of Multiple Sclerosis, with Special Reference to Fever Therapy, Prolonged Rest and Climatotherapy

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MULTIPLE sclerosis is as variable in its clinical pattern as it is in its pathology. Aside from the cadre of symptoms and signs, its outbreaks are mystifying and its remissions inexplicable. Fulminating cases may lead to death in a few weeks or even days. Equally violent attacks may lead to the point of death and then clear up, usually with residuals. Sometimes the disease may coast along for years on end and then blow up in a final explosion that may cause death in a matter of days, as in case 1. At other times the disease may continue on for decades with little indication of progression. Symptoms and signs come and go, and their places are taken by others. Sometimes the remissions are so complete and last for such a long time that reasonable doubt can be expressed whether the disease ever existed at all.

Given such variability in the course of multiple sclerosis, the only way of determining the effects of various treatments is to follow a large number of patients over the course of many years. The difficulties presented by such a follow-up study are complicated by the variations in the treatment undertaken from time to time by the various physicians who have the patients under their care at various times.

Theoretical considerations have led to the employment of a great number of remedies, and since remission is the rule in multiple sclerosis, almost any remedy will be attended by good results for a time. Some of the relapses may be attributed to interruption of the treatment, a condition that may occur when both physician and patient are lulled to a sense of security by the disappearance of symptoms. Others are attributed, and perhaps more definitely, to the occurrence of certain unfavorable influences in the lives of patients. Case 4 suffered 2 relapses associated with the occurrence of measles among his children; other patients, however, have gone through this rather common experience without harm. Pregnancy seems to affect some patients adversely, while it leaves others in better condition than before. It is always easier, in cases of multiple sclerosis, to study the unfavorable influences that lead to relapses because the relapses are often dramatic, and the influences are more apt to be remembered by the patients than are the favorable influences that led slowly to recovery.

Dramatic instances of recovery have occurred within a brief time following such procedures as lumbar puncture, but some patients assert that the performance of a lumbar puncture was the precipitating factor in a serious relapse. For many years the use of fever therapy has been advocated in multiple sclerosis. Early cases clear up as if by magic under its influence at times, yet the only early case under my observation treated by this method died within a month. Bennett and Lewis[10] claim that the early cases are benefited, but the late cases are made worse.

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† Abridgment of the Davidson Lecture, presented before the Society, October 13, 1943. Part I appeared in the January, 1944 issue of the ANNALS.

My experience with fever therapy, either by typhoid vaccine intravenously or malaria, has been wholly bad, all 11 cases, including cases 2, 5 and 9, being unchanged or worse after the treatment (table 2). Since clinical observation indicates that many of the patients who are followed over a long period of time suffer relapses during acute infections of various sorts, the use of fever therapy in multiple sclerosis is mentioned only to be condemned.

TABLE 2

Fever Treatment

CASE NUMBER	SEX	AGE AT ONSET	DURATION BEFORE FEVER THERAPY	STAGE	RESULT	RE-LAPSES	DURATION AFTER FEVER THERAPY	KNOWN DURATION OF DISEASE	CONDITION AT LAST INFORMATION
2	F	19	3	M	W	+	14	17	Steady aggravation. Died 1942. Autopsy.
5	M	28	2	M	U	+	16	18	Steady aggravation. Institution, 1941.
9	F	19	8	M	W	+	8	16	Bedridden, 1939.
18	M	22	15	Ad	W	+	6	21	Veterans Home, 1938. Better in Florida.
19	F	24	1 mo.	E	W		2 mo.	3 mo.	Died in acute stage.
20	F	30	1	E	W		9	10	Rested 4 months. Working regularly.
21	F	55	3 mo.	E	U	+	9	9	Complicated by diabetes. Disabled.
22	M	32	4	M	W	+	6	10	Steady aggravation. Disabled.
23	F	36	4	Ad	U	+	8	12	Bedridden since 1936.
24	M	34	4	Ad	U	+	13	17	Died in institution, 1940.
25	F	30	10	M	W	+	18	18	Bedridden since 1938.

E=early, M=moderate, Ad=advanced, U=unimproved, W=worse.

Theoretically, if multiple sclerosis is characterized by destruction of the myelin sheaths in the central nervous system, then agents that protect and preserve the myelin sheaths in other diseases might be expected to have a beneficial result. It has long been known that in pernicious anemia there is destruction of myelin in the long conducting pathways in the nervous system, and that the use of liver extract prevents further extension of the disease. Moreover, the neuropathy associated with alcoholism, beriberi and deficiency diseases in general is known to respond to thiamin. Both liver extract and thiamin in large doses have been used in cases of multiple sclerosis with little or no indication of any protective action. Relapses have occurred in the course of continuous dosage over a period of months. Other vitamin preparations have been used extensively without any satisfactory demonstration of their power to prevent relapses.

For some years past a search has been made for some deficiency in the diet, the correction of which would either arrest or cure multiple sclerosis, but no valid findings have come forth. Multiple sclerosis affects the well fed with the poorly fed, although Brickner and Brill[11] find a deficiency of fat in the diet of multiple sclerotics, and point to the time-honored remedy of a high fat diet. Certainly, multiple sclerosis is no frequent guest in the homes of the underprivileged, and it is particularly rare where pellagra is common, namely, in the South.

The quinine treatment enjoyed a certain vogue a few years ago when it was demonstrated that quinine was capable of inactivating the serum lipases that were found to be in excess in sufferers from active multiple sclerosis. I have used quinine rather frequently in the past, but have observed some relapses even while the patient was complaining of ringing in the ears. More extended trial of this means of therapy has proven its lack of value.

Some excitement was raised a few years ago by the supposed demonstration of excessive quantities of lead in the cerebrospinal fluid in multiple sclerosis. Control studies later indicated that the methods of testing were unreliable, but in the meantime arguments went on as to whether it was better to "delead" the patients by the use of acid ash diets or to fix the lead more firmly in the bones of the body by heavy calcium dosage. Meanwhile the periodic table was conned in a search for some other toxic metal capable of producing the disease. The efforts proved futile.

Even surgery has been advanced as a means for the relief of such symptoms as severe spasticity of the limbs and bladder. It was argued that cervicothoracic sympathectomy would abolish the vasomotor control of arterioles in the spinal cord and improve the circulation, and thereby the conducting capacity of the spinal cord. My one experience (case 2) was useful in a negative way, since she improved after an operation on the neck that did not remove the stellate ganglion and did not produce the symptoms ordinarily observed after stellate sympathectomy. She soon relapsed.

I have thus far considered certain active treatments applied in multiple sclerosis (and their number might be greatly extended) only for the purpose of demonstrating that they do not have any significant success in arresting the disease. The very fact that multiple sclerosis is characterized by remissions and relapses of great variability in degree and duration renders difficult the evaluation of any specific treatment. This is all the more patent because the etiologic factor in multiple sclerosis remains unknown.

It seems worth while, then, to discuss the other side of the picture, namely, the factors that precipitate relapses. In this way it may be possible to arrive indirectly at a means of treatment designed to avoid harmful events.

Time and again in the histories of patients who have been under observation for long periods of time the relapses have been rather intimately associated with untoward happenings in the lives of these patients. Under ordinary circumstances the patients have gone along month after month and year after year with no appreciable change in their neurologic condition, but when something unusual has come up, a relapse has been the response. Probably the outstanding occurrence in my experience has been a young man who enjoyed good health for 6 years after he first came under my care, but who suffered a catastrophic relapse as a result of being caught in the New England hurricane in 1938. The case report follows:

Case 16. H. H., a white man, single, was referred by Dr. Carden F. Warner in November 1932, at the age of 28. The present attack was not his first, since in 1925 after several minutes of intense exertion cranking a recalcitrant flivver he became exhausted and within a few hours suffered numbness on the whole right side from the neck down. Movements were especially clumsy in the foot. In addition there was a certain restlessness and inattention that caused him to drop out of college for a year. He recovered completely under prolonged rest. His second attack came on after completion of his examinations in 1928 for graduation from college. The examinations had required considerable use of his eyes, and the right eye developed a paracentral scotoma. It was partially corrected by glasses and in the course of a few weeks disappeared. During his course in law school he had a mild recurrence of the retrobulbar neuritis in the same eye, but this cleared up during a long vacation when he was in the open air practically all the time.

The patient spent 2 months in bed, receiving quinine, strychnine, phenobarbital, light massage, and weekly autogenous vaccine, improving in all respects, and by April, 1933 was working half of each day. During the summer he took an extended trip by auto, driving 500 miles one day and on another occasion turning his car over, but apparently suffering no ill effects except fatigue and bruises. By October neurologic examination revealed a positive Babinski sign on both sides and very slight incoördination in the left upper limb, but even the paracentral scotoma was reduced and the abdominal reflexes had returned to normal. Shortly after this he suffered his usual fall attack of coryza but stayed in bed a couple of days and experienced no new neurologic symptoms. In January, 1934 he was not so fortunate when he kept on working in spite of a head cold followed by an attack of migraine. There was at this time a decided increase in the paresthesias in both hands and feet, a tendency to stagger, and some dizziness. After a month in bed the symptoms largely cleared up although the left finger tips were still numb. He was able to return to work and the symptoms cleared still further. By July, 1934 a careful check of the visual fields by Dr.

Warner disclosed in the left eye a central scotoma for 1/4° involving both red and white but not blue or green. The quadrantic scotoma had disappeared, but on this left side the papillomacular bundle was definitely atrophic.

The patient was in the same condition when appendectomy was performed in August, 1938, and there were no complications.

In early October, 1938 the memorable hurricane struck the Long Island Sound area, causing tremendous damage and halting traffic. Mr. H. was in the midst of it but escaped unharmed. The next day he went out to see the sights, walked to the point of exhaustion, and then started to drive his car to Washington. This required 2 days, and he had to do all the driving because his wife was sick with a cold. The patient went to bed immediately on arrival, exhausted, and himself the victim of acute coryza. By October 12 he had to use 2 canes to get about the house, and both legs were very numb. He was troubled also with constipation and frequency of urination, these being newly developed symptoms. Examination revealed some increase in the central scotoma on the left. There was no nystagmus or speech defect. Intention tremor was present in the finger-to-nose test on both sides. The abdominal reflexes were absent. Both lower limbs were intensely spastic and there was reduction in position and vibration senses in the lower limbs.

This relapse was the most severe up to that time, and required 3 months in bed, with increased vitamin intake, and quinine (which the patient took more or less automatically during the winter months). Recovery was slow and incomplete, but quite adequate for continued employment. When I phoned Mr. H. in June, 1943, nearly 5 years after the hurricane episode, he reported that he was working daily, and that his responsibilities were increased following the death of his father and the birth of his second child. He mentioned the fact that the stiffness in his legs necessitated riding to and from his office, but he did not have to use a cane. The left eye was useless, but the right eye was normal. His handwriting was as good as ever, and he seldom experienced any disagreeable paresthesias. The sphincters gave him no trouble and his ability to handle the legal problems that came his way was quite satisfactory. He stated particularly that he had learned to go to bed as soon as the symptoms of coryza became manifest.

In summary, a young man developed multiple sclerosis in 1925 and is still actively at work in 1943. He has had several relapses, each one of them associated with an unusual event. When he yields to the attacks of acute coryza that come on periodically and takes to his bed for several days, he manages to avoid a relapse; when he disregards the warning signals he may expect a relapse. The point is that it should not have taken a national catastrophe like a hurricane to convince him.

In history after history that I have gone over relapses in multiple sclerosis have been inaugurated by neglected head colds. Such illnesses are inescapable in metropolitan centers and are usually considered trivial by the sufferer, who proceeds to transmit the virus to others. Ordinarily the cold subsides in a few days, or leaves in its train a couple of weeks of running noses and mild acute sinusitis. But in the multiple sclerotic a cold in the head must be considered as provoking a breaking down of the delicate balance between the virulence of the sclerosis organism and the body defenses, and as preparing the way for a new extension of the disease.

The lesson to be learned from the case reported above, which is different from many others only in its dramatic proportions, is that a patient who harbors the virus of multiple sclerosis must be constantly on the alert to give up at the first sign of a cold in the head. It is much preferable for him to spend a day or two in bed, even if a cold does not develop, rather than to run the risk of allowing a cold to run on to more serious proportions. Should a cold gain headway, the rest in bed should be prolonged for several days in the hope of averting further damage to the body defenses by the development of purulent rhinopharyngitis and sinusitis. Since cold vaccines have been successful in only a small proportion of patients in preventing attacks of coryza, I believe that it is hardly worth while to try to keep the multiple sclerotic immunized.

This case also demonstrates the value of prolonged bed rest in clearing up the symptoms and to a lesser extent the signs of multiple sclerosis. The patient had had multiple sclerosis for 7 years before coming under observation, and at the time of examination could hardly walk because of spasticity on the left side. Three months in bed witnessed a rather satisfactory remission that lasted with a couple of minor setbacks for 6 years. Even more favorable results have been observed in certain other cases where the principle of prolonged bed rest was applied at the beginning of the illness. One patient (case 4) was able to work for 9 years. Another (case 33) was able to return to his work as athletic coach and has been steadily so engaged for 7 years, and in case 28 the patient was active for a period of 25 years but became disabled 2 years before I saw her in 1927 and remains so at the present time.

TABLE 3

Rest Treatment

Subsequent Course

CASE NUMBER	SEX	AGE AT ONSET	STAGE	AGE AT TIME OF REST THERAPY	MONTHS' DURATION	IMMEDIATE RESULT	RELAPSE	AGE WHEN DISABLED	AGE AT LAST INFORMATION	CONDITION AT LAST INFORMATION
4	M	35	E	35	3	R	+	44	49	Worked 9 years. Institution, 1939.
16	M	21	M	28	3	I	+		39	Working. Handicapped.
20	F	30	E	30	4	I	+		40	Working regularly. Had fever treatment.
26	M	35	E	36	3	I	+	37	39	Odd jobs at home. Retired.
27	F	24	E	24	2	R			33	Healthy. Had child, 1938.
28	F	16	E	16	6	I	+	46	64	Active for 25 years. Disabled 18 years.
29	M	28	E	28	2	R			34	Working regularly. No symptoms.
30	F	29	E	29	3	R			33	Active. Two healthy children. No symptoms.
31	F	22	E	22	4	R			25	Working steadily. Few symptoms.
32	F	44	E	44	3	R			51	Working steadily. Few symptoms.
33	M	32	E	34	4	R			41	Athletic coach. No relapse.
34	F	32	M	36	4	I	+		40	Working regularly. Handicapped.
35	M	27	E	27	2	R			33	Active service in Army.
36	M	24	E	24	4	R	+		29	Active service in Navy. (Also Table 4.)
37	F	24	M	30	6	I	+	31	34	Severe relapse. Incomplete recovery.
38	M	26	E	26	2	R	+		34	Working regularly. Few symptoms.
39	F	22	E	22	5	R			26	Working regularly. Few symptoms.
40	F	30	E	30	3	R			36	Working regularly. No symptoms.
41	F	31	E	31	3	R	+	45	54	Active for 14 years. Bedridden, 1938.
42	F	42	E	42	3	I			44	Keeps house. Mild symptoms.
43	M	26	E	27	3	R			30	Working regularly. Few symptoms.

E = early, M = moderate, I = Improved, R = Recovered.

The results of prolonged rest are shown in table 3.

Prolonged rest in bed, even when "reinforced" by treatments designed to prevent relapses and restore health, is not always successful. In 1 notable case (no. 17) there were as many as 8 recrudescences of symptoms and signs during a period of as many months in spite of complete rest in bed. Finally, more or less in desperation, the patient was sent to Florida where she recovered rapidly and completely. On coming North on 3 occasions she suffered relapses, usually associated with acute infections of the upper respiratory passages.

This case indicates that climate is an important factor in the maintenance of optimal health in multiple sclerosis. This is not a question of mere warmth, since this patient experienced flare-ups in midsummer in Washington. It is not altogether a question of more sunlight, since Mrs. M. was deeply tanned from sunbathing in her apartment in Washington at the time of a relapse. Probably the less strenuous tempo of existence in the southern parts of this country acts favorably, since an admitted indiscretion in this respect served to bring on a definite relapse in Florida in January, 1942. Most important, I believe, is the relative freedom from acute upper respiratory infections that is rather general in the deep South. In this connection it is of interest to quote from a letter I received from Dr. Anderson in Miami on the occasion of my referring Mrs. M.:

"I told Mrs. M. that I had not encountered a single case of multiple sclerosis which developed locally. Likewise, all cases of multiple sclerosis that I have had the opportunity to observe have improved in this climate. They have exacerbations and remissions here as elsewhere, but seem to get along better."

TABLE 4

Climate

CASE NUMBER	SEX	AGE AT ONSET	STAGE	AGE WHEN SENT SOUTH	IMMEDIATE RESULT	RELAPSES	AGE WHEN LAST HEARD FROM	SUBSEQUENT COURSE
17	F	29	E	30	R	3	33	Stays well when in South. 3 relapses on coming North. Now in good condition. See case report in text.
18	M	22	Ad	38	I		43	Striking improvement in South. See case report in text.
44	M	28	Ad	31	R	Many	46	Relapses in North. Now hospitalized.
45	M	35	M	37	I	Few	46	Relapses in North. Now chair-fast.
46	M	31	M	33	I	Many	42	Relapses in North. Improving after winter in Florida.
47	M	44	E	45	I	Many	49	Will not stay South. Incompletely disabled.
48	M	29	E	30	I	2	31	Very severe acute stage. Relapses in North.
49	M	31	M	34	I		41	Runs fruit ranch. Few symptoms.
50	M	44	Ad	53	U		62	In South 9 years. Little change.
51	M	24	E	24	R	1	29	Active service in Navy (see table 3).
52	M	29	M	31	I		39	Handicapped. Not much change in 8 years.

E = early, M = moderate, Ad = advanced, R = recovered, I = improved, U = unimproved.

Table 4 shows the experience I have had with patients who have gone South for varying periods of time. It must be admitted that only a couple of these patients have definitely made their home in the South, and that when they have done so it has been because of advanced disability. Most of the others have returned North when the weather improved, and all of these have suffered relapses, and most of them are now disabled. Even though the eventual results are far from satisfactory, at least the patients have shown a much greater tendency to improvement under climate therapy than they have after fever therapy (see table 2).

There seems to be a considerable resistance to the idea of going South permanently for the sake of health. Multiple sclerosis is a disease of young adults, and they in particular seem to look upon the Southland from this distance as a place for retired millionaires and broken-down dowagers, for playboys and female barflies, but no place for a man or woman who has a career to consider. This chapter is not intended to be an advertisement for Florida or Texas or Southern California or any other place, but the results of residence in the South have been so gratifying and so outstanding in cases of multiple sclerosis that I cannot help but believe that a patient with this sinister disease is fully justified in leaving the North permanently and reëstablishing himself in a climate that has proven definitely more kindly to the victim.

Patients with multiple sclerosis recover from the early stages of the disease and hence are lulled into a false sense of security. When early relapses occur they are not especially frightened, since to them it is merely a recurrence of the old trouble that will pass away as it did before. By the time the disabling recrudescences are under way, sufficient of the myelin sheaths have been destroyed in the regions of the ventricles to give the patient a pathologic euphoria that makes him see no reason for undergoing any hardship such as relocation.

And he spends the rest of his life gaily in a wheelchair.

Sometimes even a late case of multiple sclerosis takes on a new lease on life as the result of a prolonged sojourn in the South. Such a one was W. F. W., who has been under my observation for 13 years.

Case 18. W. F. W., a white man, was referred by Dr. John B. Nichols on July 10, 1930, at the age of 30. His illness began acutely in 1922 with headache, sore throat, somnolence and fever to 103.6°F. Signs of lobar pneumonia were present, also some meningeal irritation, since the spinal fluid showed 15 lymphocytes per cu. mm. On the fifth day the Babinski sign was positive. The illness lasted 3 weeks, but thereafter he found that he had lost his agility. There were no further symptoms until early in 1929, when difficulty in vision and increased unsteadiness of gait developed. On examination the pupils reacted normally, but there were large paracentral scotomas in both eyes, and the temporal halves of the nerve heads were pale. Nystagmus was present in all directions. The face was quite mobile, and speech was slurring and scanning. The upper limbs were slightly awkward, with increased reflexes and normal sensibility. The abdominal reflexes were absent, and there was evidence of incontinence. Both lower limbs were spastic and ataxic, with exaggerated reflexes and positive Babinski signs. The patient was unable to balance himself with the feet together even with the eyes open, and his gait was quite ataxic. Sensibility seemed unimpaired.

In spite of the rather advanced condition that the patient presented on his first visit he improved somewhat under autogenous vaccine treatment, and a year later showed much better coördination of both upper and lower limbs. The scotomas had narrowed, and the emotional control was better. He was steadily at work under rather unpleasant conditions. Nystagmus remained very active. Indeed, he took a good deal of exercise, occasionally walking as much as 6 miles a day. By 1935 the disease had made further ravages, which showed up particularly in the carelessness as regards clothes, shaving and washing. He continued at work in the family firm, but took little interest in it, and was unable because of the spasticity and ataxia to get around without a cane. There had been no acute relapses but rather a steady progression of the disease. From the medical standpoint he continued to drift, also taking chiropractic and osteopathic treatments without tangible results.

Examination in 1937 showed some reduction in central vision with large paracentral scotomas, moderate optic atrophy but full visual fields at the periphery. Nystagmus was a prominent feature. The face was rather mask-like, but occasionally contorted into a silly grin. Speech was slurring and scanning, rather slow and hesitating. The upper limbs were under fairly satisfactory control and showed no sensory disturbances. The lower limbs, however, presented a peculiar high-stepping gait, with tendency to come down on the heels, misplacement of the feet, and curling under of the toes. The patient could not stand with the feet together and could not walk without a cane or other support. In spite of the very marked awkwardness, there was surprisingly little alteration in objective sensibility, and no complaint of paresthesias. The sphincters seemed to be under good control. There was no significant improvement under liver injections. Following his disappointment with this form of therapy he received a series of 6 intravenous typhoid injections, which made him worse. After this the patient was forced to give up even his minor clerical job and remain at home. Early in 1938 the conditions at home became intolerable; the patient was practically confined to a chair, and application was made for domiciliary care at the Veterans Administration Home, Bay Pines, Florida. I thought that I had seen the last of W. F. W. except possibly an obituary notice.

Instead, the *Evening Star*, under date of Sept. 3, 1941, carried his picture and the headlines: " 'Hopeless Cripple' Confounds Doctors in Tricycle Travels." The story is worth quoting.

> "Four years ago, a 'hopelessly incurable cripple.' Today a smiling fighting chap who can walk a little and hope.
>
> "That's the story of W. F. W., 41-year-old World War veteran, who is back in Washington with his family after what was destined to be his last trip—to a Florida veterans' hospital in 1937. Mr. W. attributes his remarkable battle for recovery to intense mental concentration and physical effort. Even the Government doctors at the Florida hospital had given his case up, but Mr. W. had just started his fight.
>
> "He read biographies of great men and women who had conquered their own mental and physical ills. He talked and thought religion, philosophy and psychology. To the amazement of the doctors he began to improve, and finally, in August 1939, he was able to ride a tricycle.
>
> "The tricycle has done the rest for him, Mr. W. commented yesterday at his family home. Since he put a cyclometer on the wheel 18 months ago he has pedaled more than 9,500 miles. From the Bay Pines Hospital to the automobile races at Daytona Beach, to St. Augustine by way of Marineland and about 600 miles of the trip home—these junkets represented just a few of Mr. W.'s tricycle travels.
>
> "More pedaling is in store for him during his visit home. Baltimore, Atlantic City and Philadelphia are on his travel schedule. He is to return to Bay Pines in about a week and plans to use his tricycle at least 800 miles of the way.

"Mr. W. was stricken in 1922 with a severe case of pneumonia. He recovered but continued to suffer after effects of the illness culminating in 1930, when both legs became useless.

"But the doctors were wrong when they said 'never again,' Mr. W. contends. And he's out to show them."

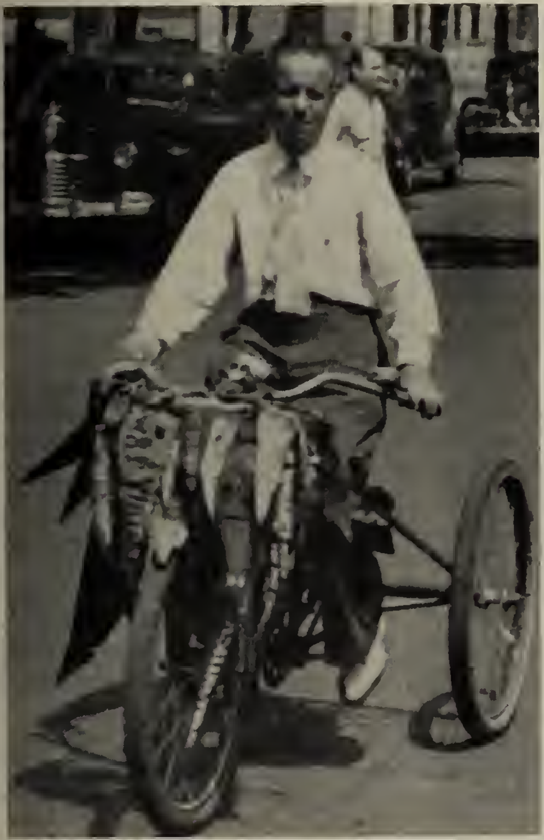

FIG. 8. Case 18. W. F. W. on his tricycle in 1941. In 1938 after steady progression of his multiple sclerosis since 1922 he had been sent to Florida with no hope of his return.

Shortly after this piece appeared in the newspapers, the patient presented himself, deeply tanned, filled out in chest and limb, and appearing steadier than he had been for a decade. He still had to use a cane in walking, but the peculiar "heel first" gait had been much modified. His limbs were spastic, with positive Babinski signs, and ataxia was well marked in the heel-to-knee test, but sensibility was intact. The upper limbs were under good control. The face was more animated, yet at the same time there was less tendency to break into a silly grin, and speech was definitely improved. His personal appearance was quite a contrast to the sloppiness that had characterized him before.

The patient stated that for the first 12 to 18 months at the Home he slumped, accepting the attentions of the medical staff without much enthusiasm. He was lonely, and aside from getting a lot of rest and sunshine he was just vegetating. Finally something came over him and he started to look around and see what could be done about it. The idea of a tricycle suggested itself to him and he had one made, and since then he has been traveling around Florida a good deal. On long trips he often has his machine sent by train, and he speaks of driving it rather than riding it. He showed me the contraption. It has a more or less bicycle frame with 2 rather heavy rear wheels and a comfortable saddle (fig. 8). He is able to make as much as 8 miles an hour on it. Florida is particularly good since the ground is level. He carries his effects in a shopping bag, which is all right when it doesn't rain. He is a great believer in vitamins, having taken a good many bottles of the B complex, and he says that his enthusiasm has infected some of the other men down there so that there are now 8 machines on the place. This winter he expects to make a tour of Cuba.

Instead of Cuba, Mr. W. "drove" his machine across the southern part of the country to Los Angeles and then up to San Francisco. He encountered a long hard hill on the way that could be negotiated only by pushing the machine for 11 miles. It required a full day, but in spite of this unusual exertion the patient did not seem to suffer ill effects.

The patient has now been living in Florida for 5 years. He still shows gross spasticity and ataxia in the lower limbs that make walking possible only with a cane, but in all other respects he has taken on a new lease on life. Since his progress under my observation from 1930 to 1938 was steadily downward, it must be admitted that the new environment was largely responsible in restoring him to an unusual degree of activity.

This is an exceptional case, but is sufficiently striking to make worth while a consideration of climate in the treatment of multiple sclerosis. Another patient (case 49) was almost disabled when he went to southern Colorado in 1936 after a downhill course for 3 years preceding that period. Seven years later he was getting around well and running a fruit ranch. The patient of case 50 was completely disabled and almost blind in 1934 after 6 years' illness, and after 9 years in Florida shows little or no advance in the disease. Patient no. 51 is a rather early case, it must be admitted. He recovered from his first attack in Arizona in 1938, had a very severe relapse in Washington in 1941, but on going to Arizona again he recovered sufficiently to pass the examinations for the Navy and is reported by his father in June, 1943 to have made several trips on convoys.

The other cases in table 4 have either remained in the South too short a time or have removed there too late to make much difference in their disability, although they report that their condition remains stationary or improves with continued residence.

For comparison I have assembled a group of cases that might be termed controls. These are people who received no special treatment beyond quinine, liver extract, vitamins, high fat diet, autogenous vaccines, calcium, moderate rest periods, physiotherapy and all the hundred and one remedies that they have read about or been given by their physicians. The results are indicated in table 5. These figures probably represent the average course of multiple sclerosis in the North Temperate Zone, and while there

TABLE 5

Ordinary Treatment

CASE NUMBER	SEX	AGE AT ONSET	DURATION WHEN FIRST SEEN	STAGE	RELAPSES	AGE WHEN LAST HEARD FROM	KNOWN DURATION OF DISEASE	SUBSEQUENT COURSE
1	F	25	15	Ad	+	40	15	Died in acute recurrence. Autopsy.
3	M	29	1 mo.	E	+	29	6 mo.	Died after subacute course. Autopsy.
6	M	12	16	Ad	+	31	19	Institution, 17 years.
7	F	27	12	Ad	+	40	13	Institution since 1941.
8	F	10	3	Ad	+	17	7	Institution since 1939.
10	F	28	5	Ad	+	34	6	Home invalid.
11	F	17	13	Ad	+	32	15	Home invalid.
12	F	32	11	Ad	+	43	11	Died.
13	M	32	1	M	+	36	4	Steady progression. Died in mental hospital.
14	F	31	1	M		35	4	Institution since 1941. Improving.
15	M	34	7	Ad	+	42	8	Institution since 1935.
53	F	22	2	E		27	5	Improved during first pregnancy. Recovered in second.
54	M	36	1 mo.	E		48	12	No recurrence. Working regularly.
55	M	27	9	M	+	52	25	Confined to wheelchair, 8 years.
56	M	36	1 wk.	E		44	8	Working steadily. No recurrence.
57	M	28	2	M	+	37	9	Died after 5 years of disability.
58	F	24	8	E	+	39	15	No complaints. Had child in 1934.
59	F	36	19	Ad	+	61	25	Stationary condition, 10 years.
60	M	31	1	E		35	4	Working steadily. Mild symptoms.
61	F	37	1	M	+	44	7	Working steadily. Handicapped.
62	M	55	10	Ad	+	68	13	Died after 11 years' disability.
63	M	32	13	M	+	54	22	Died after 6 years' disability.
64	F	26	6	E	+	41	15	Working regularly. Few symptoms.
65	M	24	17	M		43	19	Working regularly. Handicapped.
66	F	36	10	M	+	52	16	Keeping house. Handicapped.
67	M	27	8	Ad	+	40	13	Working. Badly handicapped.
68	F	30	2 mo.	E	+	39	9	Working steadily. Few symptoms.
69	F	38	6 mo.	E	+	45	7	Died after acute relapse.
70	M	41	3 mo.	E	+	45	4	Steady progression. Died.
71	F	30	3	M	+	40	10	Keeping house. Handicapped.
72	F	15	18	Ad	+	37	22	Steady progression. Chair-fast.
73	F	30	3 mo.	E	+	41	11	Keeping house. Handicapped.
74	F	32	6 mo.	E	+	35	3	Severe relapse. Institution.
75	F	22	3	M		28	6	Keeping house. Few symptoms.
76	M	40	5	M	+	47	7	Severely handicapped.
77	M	25	3	Ad	+	32	7	Died after 6 years' disability.

E = early, M = moderate, Ad = advanced.

are exceptionally fortunate results in some instances, there are also extremely unfortunate results in others.

SUMMARY

The general conclusions arrived at from a long-term study of patients with multiple sclerosis are that prolonged rest is the one most important factor in the early treatment of the condition, and that a warm climate with freedom from upper respiratory infections is the best insurance against further crippling recrudescences of the disease. Lacking definite knowledge of the specific etiologic agent of multiple sclerosis and any specific remedy, the patient is obliged to depend upon his own immunity mechanisms to hold the disease in check. This immunity is apparently a rather uncertain one, one that must be built up at the expense of giving up competitive activity in metropolitan centers, but nevertheless an immunity that may last over long periods of time, measured even in decades.

The same principles hold true in the treatment of certain other chronic and relapsing conditions that may eventually prove crippling, such as tuberculosis, arthritis, rheumatic heart disease, colitis, peptic ulcer and the like. And in some of these disorders a great deal more is known of etiologic factors than is the case in multiple sclerosis. Especially as regards tuberculosis, the importance of rest and climate are so well established that even the various surgical and other therapies have not taken the place of rest and climate. Furthermore, the results in cases satisfactorily handled during the early stages of tuberculosis are so much more satisfactory than those in which the disease is far advanced that it should be obvious that we can learn a good deal more in the treatment of multiple sclerosis from applying the same principles.

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Effect of sulfonamide therapy on public health aspects of pneumonia. "A study was undertaken to ascertain whether sulfonamide therapy has had any effect on public health aspects of pneumonia comparable to the remarkable changes observed in treatment of individual cases," HARRY E. UNGERLEIDER, M.D., F.A.P.H.A., HENRY W. STEINHAUS, PH.D., AND RICHARD S. GUBNER, M.D., report in the American Journal of Public Health for September, 1943. "An analysis was made of pneumonia experience among large groups of industrial employees carrying group health and life insurance with the Equitable Life Assurance Society of the United States, and a comparison was made between the pre-sulfonamide years 1935–1937 and the period from January 1, 1939, to June 1, 1942.

"Most striking was the reduction in the case fatality rate from an average of 20.8 per cent to 3.9 per cent in this short space of time. Significant too was a decrease in the total duration of illness from the modal (most frequent) period of 38 days in 1935 to 27 days in 1941. It is calculated that the advent of sulfonamide therapy has proved a boon to industry, saving the lives of some 25,000 workers annually. A further annual saving of over a million working days has resulted from shortening of the period of illness.

"The incidence of pneumonia has increased from an average of 2.6 per 1,000 annually in the pre-sulfonamide period to 3.0 per 1,000. Possible reasons for the increased frequency of pneumonia are discussed. There is no evidence that sulfonamide therapy, per se, is responsible for the increased prevalence of pneumonia and other factors such as congestion in industrial areas incident to the war effort may be responsible. Since all types of pneumonia were included in the study it is possible that an increase in the number of cases of 'atypical' or virus pneumonia may in part be responsible for the observed increase in the frequency of pneumonia."

President's Page

WHAT IT TAKES

In times such as these, few individuals, institutions or organizations escape criticism. And the American Medical Association has been no exception. This fact alone would be no cause for concern were it not that there are indications of defection in the ranks of organized medicine. To those of us who believe that unity is of paramount importance in the present crisis, recent developments have been somewhat disturbing.

Within the past few months, two new organizations have come into existence whose avowed objectives are to deal adequately with the social and economic problems of medicine. Sponsors of one of these groups declare that the American Medical Association is not properly organized to cope with these problems, and the other, that it has not been willing to do so. They propose remedies which have appealed to many physicians.

It is my considered opinion that physicians persuaded to these beliefs will discover that results will fall short of expectations. I would point out to our members that the expenditure of money will, of itself, not solve troublesome medical problems. Nor can it be accomplished by a few leaders, capable though they may be. What it takes is an enlightened and active interest on the part of at least a majority of the doctors who make up an organization's membership.

I am afraid that some of our physicians believe that if they give financial support to an organization, their responsibility is discharged. Let them not delude themselves in this regard. My contention is that if medicine relies upon the efforts of numerous, generously supported medical organizations, splendid though their objectives may be, our cause will be lost. If we are to remain strong, we must stand united in one body—the American Medical Association.

Whatever the shortcomings of the Association, they are largely those of its members. On the whole, its record is one of which the medical profession can be very proud. Where it fails, we—each of us—should help find a solution. How? By expressing our views to those who represent us. The force of our opinion will have its effect.

So I say to you, our members, support organized medicine, not only with your dollars, but with your hearts and minds. If you are not satisfied with its leadership, it is within your power to change it. If you would change its structure, that can be done, too.

Each of us might profitably ask ourselves the following question: Have I contributed any worthwhile ideas to my medical society? Have I informed myself in regard to what it is doing? If so, have I indicated my approval or disapproval of what is being done? Have I attended business meetings? Do I read my medical journals regularly? If I have done none of these things, why not?

Remember what it takes to make a strong medical organization—a generous, unselfish giving of oneself to the cause of medicine.

Fred R. Sanderson

Editorials

COMMITTEE ON MEDICAL CARE

The delivery of medical service is progressively becoming a more complicated subject. There was a time when the chief concern seemed to be with costs. This is no longer true. Experimentation with various types of medical service plans has brought into being problems peculiar to any organized method of delivering medical care.

None of the plans to date have had to stand the test of an epidemic or widespread illness. Are they actuarially and medically sound? Will a subsidy be necessary? If so, should the Government participate? Is this desirable even to a partial extent? How can the practice of preventive medicine by private practitioners be stimulated? Can it be successfully included in medical service plans? If so, how can it be done? What about group medical practice or the establishment of diagnostic clinics?

These questions are posed merely to suggest the scope of the inquiry which must be made if it is to be done adequately. With this in mind, the Society's Executive Board submitted to the Society at its last business meeting an amendment to the Society's Constitution and By-laws which would change the name of the Committee on Medical Economics to the Committee on Medical Care, thereby indicating that its activities had been broadened to include all matters pertaining to the delivery of medical service.

The primary functions of the Committee will be to advance constructive plans for the consideration of the Society and to coöperate with the Council on Medical Service and Public Relations of the American Medical Association.

In a recent communication, state medical societies were requested to designate an existing committee or to create a new one to function with the Council on a state level. The local Committee on Medical Economics was chosen by the Executive Board and the Council was so notified.

It will be of interest to those readers who are not familiar with the Council that the House of Delegates of the American Medical Association charged the new Council with the following duties:

"(a) To make available facts, data and medical opinions with respect to timely and adequate rendition of medical care to the American people; (b) to inform the constituent associations and component societies of proposed changes affecting medical care in the nation; (c) to inform constituent associations and component societies regarding the activities of the Council; (d) to investigate matters pertaining to the economic, social and similar aspects of medical care for all the people; (e) to study and suggest means for the distribution of medical services to the public consistent with the principles adopted by the House of Delegates, and (f) to develop and assist committees on medical service and public relations originating within the constituent associations and component societies of the American Medical Association."

The Committee on Medical Economics of our Society is composed of outstanding physicians in this community, men who are familiar with many of the social and economic phases of medicine. They can be counted on to give the Society the leadership it needs in this direction.

BOARDS OF VISITORS

The action of the District Commissioners in appointing a board of visitors for the municipal hospitals deserves more than passing notice, not for its novelty but because it represents the recognition of a principle of public administration which was almost universal in this country one hundred years ago and which is now being rediscovered.

It was the practice from the early days, in the organization of public hospitals and welfare institutions, to vest the control in a board of trustees, prominent citizens of the community who looked upon public duty as a public trust and who represented in a very direct way the interest of the public in the proper administration of its institutions. To the public the trustees *were* the public; they were well known, were unpaid, and in a very real sense they could be looked upon as more truly disinterested than any paid official.

As time went on, institutions became bigger and more complicated, and volunteer workers seemed to have less and less time to devote to the details of management; such matters as the details of medical care, the methods of purchasing and bookkeeping, the setting of salary scales, and so on, were evidently better left to specialists. So much stress was laid on the mechanics of control that in a number of states unpaid boards have been abolished, a move which has seldom resulted in improvement and which in a few instances has been of positive detriment.

A lay board of visitors can be of great value to an administrator by bringing the layman's point of view and acting as friendly advisers. They should be consulted by the administrative authority in matters of policy change, and they should familiarize themselves with the needs of the institution in order that they may present these needs authoritatively to the appropriating body. The ultimate decision on administrative matters must always rest with the officials upon whom the legal responsibility rests, but the board should see to it that complaints are investigated and suitably acted upon after such investigation. They are a part of the institution; it is their duty to defend the institution if it is right and urge correction, in public if need be, of correctible defects of administration, personnel, finance or construction.

It is of interest to note that in a few instances at least the Federal Government has retained the practice of appointing boards of visitors. In 1852 (and the law is still in force) the Congress enacted a bill written by that most remarkable woman, Dorothea Lynde Dix, providing for what is now known as Saint Elizabeths Hospital. The functions of an unpaid board have never been more aptly set forth than in the words of that statute: "they shall exercise so careful a supervision over its expenditures and general operations that the Government and community may have confidence in the correctness of its management."

The Commissioners have rendered a service by their appointment; it is a step that should redound to the benefit of the public hospitals of the District.

W. O.

" . . . THE MOST SERIOUS GAP"

Views expressed by the Social Security Board on health and medical care are of special significance at the present time. Before many weeks it is expected that Congressional hearings will begin on the Wagner-Murray-Dingell bill. Arguments now being advanced for and against this legislation will undoubtedly have some bearing on the results of the deliberations of Congress.

It is hoped that physicians will read the statements both favorable and unfavorable to this legislation. In doing so they will gain a better understanding of the issues involved.

The following extracts from the 8th Annual Report of the Social Security Board represent the views of a group favorable to the Wagner-Murray-Dingell bill.

"Our country may well take pride in its progress during the past half century in extending the average length of life and raising standards of physical well-being. We may be proud also of the Nation's total resources for the prevention and care of sickness—organized public health services, splendidly equipped hospitals, and skilled medical practitioners and technicians. In combination with the relatively high levels of living achieved by the American population as a whole, these resources have served to make the health and life of the average man more secure than that of his parents or grandparents. Failures, however, to assure healthful growth and development among even the generations now young are evident in many ways, among them the record of the first 3 million men examined for selective service. Though these men were in the ages 21–36 and their average age was 26, half failed to meet the physical and mental requirements of the system for general military service, while about one-fourth could not qualify for even limited service. Of the 900,000 who were thus disqualified, at least 200,000 had defects which were considered easily remediable. Among a large group of 18- and 19-year-old registrants, about 25 per cent were rejected on physical or mental grounds. Rejection rates reflected economic handicaps. Among boys classified as farmers, the rate was about 40 per cent, and among emergency workers and the unemployed, nearly 38 per cent, while for those classified in skilled occupations and professional and semiprofessional services, only about 20 per cent were rejected for these reasons. Though standards for military service were more rigorous than those required in many civilian activities, prevalence of physical defects among this cross-section of the young adult population has serious implications for individual and social security.

DIFFERENCES IN THE EXTENT OF HEALTH PROTECTION

"Average achievements in health security have little meaning to a particular individual; what matters to him is his own chance to live a full life unhampered by sickness or incapacity. The average conceals the fact that in all parts of the country there are groups whose chances of survival are no greater than those which existed in the United States 60 years ago. Some places in the United States, especially rural areas, are almost without access to modern facilities to prevent and cure sickness.

"Progress in improving health and longevity has come largely through organized measures for curbing or eradicating hazards of whole communities—that is, through public health and sanitary provisions to safeguard water and milk supplies and prevent or control communicable diseases such as typhoid fever, diphtheria, tuberculosis, and malaria. Sickness and death rates from causes such as these make it clear, however, that there still remains a tremendous weight of preventable or curable sickness and postponable death which could be lifted through the use of measures long since established as appropriate functions of public health and medical services.

"In these as in other fields of public action, striking variations arise from differences in public and personal resources. A baby's chance to survive the first year of life, for example, was nearly three times as good in the best State in 1942 as it was in the State where the infant mortality rate was highest. The death rate from tuberculosis ranges, among the States, from 79.1 per 100,000 of population to 16.2, excluding States in which facilities for the care of that disease have attracted patients from other areas. While climatic and other differences enter into comparisons such as these, a major underlying factor is the discrepancy in the funds made available by States and localities to carry on widely accepted public health functions needed to prevent and care for sickness within their borders. Recognition of this situation was made in the provision of Federal grants for public health and maternal and child health and welfare under the Social Security Act, administered, respectively, by the U. S. Public Health Service and the Federal Children's Bureau. At the end of nearly 8 years, however, these measures had not yet proved sufficient to remove the handicaps of wide geographic areas and certain groups in all areas.

"Within localities, moreover, sickness varies according to income level. The chance for health, and even for survival, is least among the poor. The general death rate among boys and men of working age has been found to be nearly twice as high for unskilled laborers as for professional men or proprietors, managers, and officials. Wage earners in nonrelief families with annual incomes of less than $1,000 were found to have, on the average, nearly twice as many days of disability during a year as those in families with $3,000 or more. Families on relief reported nearly three times as many days of disability per person as were reported for persons in families with incomes of $3,000 or more. Children in relief families lost nearly a third more time from school or play because of illness than those in families with moderate or comfortable means. It is of little use to argue whether sickness and premature death are more often the cause or the result of poverty; in either case, it is necessary to stop the down-spiral likely to end in demoralization and dependency.

"Public health programs for the prevention and control of communicable diseases have wiped out or relegated to an unimportant place many ailments which once were leading cause of sickness and death. Success has been greatest in the acute ailments of childhood and youth. Increasing proportions of the babies born in the last half century or more have gained a chance to live to old age. Except for accidental injuries, the leading causes of death are now the slowly crippling diseases of middle age and old age, often ushered in by long periods of increasing disability. The attack on these forms of ill health cannot be made by mass methods, such as chlorinating a water supply to eradicate typhoid fever. To prevent and curb such causes of disability and death requires the highly individualized services of physicians, technicians, and laboratories. These services are necessarily expensive. They are, moreover, the forms of medical care for which American families typically pay, when they receive them, as individuals. The direction of progress in health security in the United States lies increasingly in ensuring that all groups in the population can get for the prevention and care of sickness whatever medical care they need, not only as members of communities but also as individuals.

Costs of Medical Services

"The largest part of the Nation's total bill for health and medical care is paid directly by families. In 1942, government—or the population as a whole as taxpayers—paid about 20 per cent of the total, exclusive of the cost of medical care for the armed forces. Philanthropy and industry combined accounted for probably not more than 5 per cent of the total. About three fourths of the total paid in a year comes directly from family pocketbooks, and of this sum a very large part is paid by the families which suffered serious illnesses. Serious sickness is likely to make inroads upon family resources through temporary or prolonged loss of earnings and increases in costs of food and household services, as well as in terms of medical bills. The major part of the support of measures for security in life and health in the United States thus falls fortuitously upon households when they are least able to pay for it. The care a family receives depends in considerable part upon its income. Despite all the public provisions for medical care and the care given through philanthropy and the unpaid services of physicians and others, low-income families receive, on the average, much less care than those in better circumstances, though their needs for care are greater.

"From the standpoint of the family which suffers serious illness, adequate medical care must nearly always be expensive. For the country as a whole, costs are not such a problem. It is estimated that about $4.5 billion was spent in 1942 in the United States for medical care and public health services. This was a very small fraction of the Nation's income. Among individual families the average outlay was relatively small, not more than 3, 4, or 5 per cent of annual income. If 1942 followed the pattern of an earlier prosperous period for which detailed studies are available, low-income families, which have the greatest need for care and receive the least, spent a somewhat larger proportion of their annual income for medical services than the well-to-do.

"The problem of medical bills arises from the fact that they are unlike any other basic item in the family budget. No family can set aside 4 or 5 or even 10 or 20 per cent of income for a given year and know that it will be enough to meet medical bills. For the individual family, medical costs are unpredictable and largely uncontrollable. In any given year, medical needs will confront some families with economic disaster and others with a burden which can be met only by sacrifice of other essentials, but no one can predict which families these will be. Over the cycle of a generation, few households escape a year of more in which illness brings heavy or crushing costs, but none can select for sickness the year when they are best able to pay for what they need.

The Need for Security in Health

"In the opinion of the Social Security Board, the lack of adequate measures to cope with sickness and disability represents the most serious gap in provisions for social security in the United States. This lack affects all areas in the country, all age groups, and nearly all income levels. Compensation for wage losses arising from temporary or prolonged incapacity to work would help employed persons and their families to maintain their financial independence when they suffer these involuntary reductions in earnings. It cannot be expected, however, that replacement of a part of customary earnings would be effective in enabling the population to meet the additional costs that are due to or associated with sickness of the worker or members of his family, or to meet needs for care which now are unmet.

"Gaps and inadequacies in existing measures for public health and the lack of systematic provisions for assuring access to medical services for all persons who require care inevitably cast direct or indirect burdens on all other branches of the social security program. These gaps and inadequacies are reflected in costs of relief, in unemployment or under-employment—to which, in ordinary times, the worker in substandard health is particularly liable—and in earlier retirement than many persons would choose if they were physically able to continue work. The goal of full employment implies not only job opportunities but also opportunities for all to achieve and maintain the health and vigor without which the individual cannot work effectively. The Social Security Board believes that provisions for health and medical care have an important place in any comprehensive and adequate program of social security."

* * *

"Costs of medical care, as has been pointed out, are a peculiarly appropriate field for insurance provisions, since the problem does not lie in the average annual cost but in the uneven and unpredictable incidence of risk to which nearly all the population is subject. These costs, as well as losses of earnings, constitute an important direct factor in causing dependency. Moreover, there is impressive evidence that the barrier of currently meeting costs of medical care keeps many individuals from receiving services which might prevent or cure sickness and disability and postpone death. From the standpoint of the general welfare and of safeguarding public funds for insurance, assistance, and public services provided in dependency, the Board believes that comprehensive measures can and should be undertaken to distribute medical costs and assure access to services of hospitals, physicians, laboratories, and the like to all who have need of them. For all groups ordinarily self-supporting, such a step would mean primarily a redistribution of existing costs through insurance devices. It should be effected in such a way as to preserve free choice of doctor or hospital and personal relationships between physicians and their patients, to maintain professional leadership, to ensure adequate remuneration—very probably, more nearly adequate than that in customary circumstances—to all practitioners and institutions furnishing medical and health services, and to guarantee the continued independence of nongovernmental hospitals."

In and Out of Focus

BY THE OBSERVER

Dr. Fishbein on Medical Care

Last November, when Dr. Morris Fishbein, Editor of the *Journal of the American Medical Association*, addressed the San Francisco County Medical Society, his remarks attracted wide attention. He defended vigorously the course pursued by the A.M.A. with respect to medical plans. Dr. Fishbein said, in part:

"In the United States, during the past fifteen years the private practice of medicine has been supplemented and in many places substituted by new techniques for providing medical care. Already some thirteen millions of people are covered by insurance against the costs of hospitalization through the so-called Blue Cross plans, industrial group insurance, fraternal hospital insurance, and in other ways. Many large industries have provided systems of complete medical care for their employees. Still more arrange to meet the costs of catastrophic surgical and medical conditions.

"Under these plans the patient may utilize the service of his own doctor or a specialist selected by his doctor, or of groups of physicians organized in a variety of ways. The groups of doctors who render service are sometimes organized as employees of a corporation, sometimes as partners in a corporation, sometimes as the employees of educational institutions.

"There are plans for distribution of medical service under prepayment techniques organized by various communities, by farm groups, by governmental agencies, and by industries. Most of these plans differ today from what they were when they were first organized. They are still undergoing active evolution.

"There is much misunderstanding of the relationship of the American Medical Association to these proposals. The American Medical Association has accepted the principle of insurance against the hazards and costs of sickness. However, medical leadership does not encourage politics in medical care and is, in general, inclined to local rather than federal control.

"Notwithstanding much that has been said to the contrary, there has never been opposition to the practice of medicine by groups of physicians. There has been opposition to certain methods used by such groups which tend to deteriorate the quality of the service and make the cost in fees considerable. Underbidding by groups of physicians for the medical care of employees of certain industries, house-to-house solicitation of patients and similar practices are fought by the medical profession, not with a view to protecting the physician or his fee for service, but primarily because such practices lead to deterioration in the nature of medical service that is rendered."

"We, in this country, have already begun many experiments with and without the aid of the Government. Mr. Henry Kaiser's industrial plan is evidence of the manner in which experimentation may be undertaken, but time alone can indicate the evolution which that plan will follow to meet changing economic situations. Even the kind of group practice utilized by the Mayo, Lahey, and Crile Clinics, not to mention the Shadid and Ross-Loos Clinics, undergoes constant changing. It would be folly to offer any one of these experiments in the light of present conditions as the system to be followed by the entire nation.

"No doubt, the plan utilized by the Farm Security Administration for giving medical care to 105,000 farm families has virtues, but even that plan has been modified from county to county, and from state to state.

"Many a great organization, such as Sears-Roebuck, Western Electric Company, Endicott-Johnson Shoe Company, and, indeed, the headquarters of the American Medical Association, utilizes the services of the well-established insurance companies like the Metropolitan, New York Life, Travelers', Aetna, etc., to provide hospitalization, or sickness, or catastrophic insurance for its employees.

"Fourteen state medical societies have erected plans whereby such organizations coöperate in extending hospitalization and sickness insurance to groups of workers who care to coöperate.

"Medicine has not been static, neither has there been discouragement from professional medicine beyond what is needed to protect the public against those who see in the administration of medical service an unusual opportunity for exploitation because of appeal to a man in his time of greatest need."

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Aid Planned for Returning Physicians

Medical journals coming across your Observer's desk indicate a growing feeling among the medical profession that plans should be made now to aid physicians in the armed forces upon their return to civilian life. In the District of Columbia we are already considering several promising proposals, one being that the medical profession in Washington be canvassed to ascertain how many have desk space available in their offices or can stagger hours in such a way that their offices can be used by other physicians. Office space is at a premium at the present time, particularly in the downtown area, and we must guard against a situation where our returning medical officers cannot find a place to reëstablish themselves.

One of the most practical proposals was made recently by the Medical Economics Committee of the Bronx County (New York) Medical Society. The Committee adopted a resolution which provides for the establishment of a fund to be known as the Post War Emergency Loan Fund. This fund is to be administered by a Loan Committee of the Society. The resolution states that "at the termination of the period of emergency as determined by the Society, this fund be known as the general fund of the Bronx County Medical Society, to be used for purposes beneficial to the Society as determined by two-thirds vote of the membership present at any Society meeting." The fund is to be raised by a five dollar assessment levied against each non-military active member of the Society, the assessment to be paid with the dues.

In commenting upon the action of the Medical Economics Committee which still must be approved by the Society, the Bronx County Medical Bulletin has this to say:

"We believe that the above resolutions represent one of the most sensible gestures made toward postwar planning that we have yet found. It frankly faces a situation that will almost assuredly arise with the termination of the war. Our members who have sacrificed not only the comforts and happiness of civilian life but have risked their lives and future security, will, on their return, encounter very difficult problems including personal adjustment and economic adjustment. Meetings, speech-making, parades, flag-waving and the streams of confetti may have their places in bestowing recognition to homecoming veterans but unfortunately they are generally considered out of all rightful proportion to their intrinsic value. Concrete aid in postwar adjustment is the only matter that should concern the intelligent; and doctors should be the first group to promulgate this principle.

"It is our opinion that there is not a member of the

Society who realizing the sound vision behind this action will not approve with enthusiasm and with the conviction that he is doing his part in constructive postwar planning for his colleagues now in service."

It will be heartening to our men in the services to learn of this and other steps being taken by medical societies with a view to lending them a hand when they return home.

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More on Unionization In the December issue of the MEDICAL ANNALS this Observer commented on an editorial which appeared in the October, 1943 *Rocky Mountain Medical Journal* in which it was reported that resolutions had been presented at the Annual Meeting of the Colorado State Medical Society which would place the House of Delegates of that body on record as favoring the formation of a union by the American Medical Association. If adopted, delegates of the Colorado State Medical Society to the American Medical Association would be instructed to present a resolution to this effect at the next meeting of the Association in June, 1944.

Your Observer stated that the *Journal* did not indicate whether the resolution had been adopted by the Colorado society. Dr. Lyman W. Mason, Editor of the *Journal*, writes, however, that the House of Delegates of the Colorado Society did approve the resolution. If the *Journal* had been examined with greater care this fact would have been ascertained for it appeared in the organization section of the October issue. Dr. Mason says that the Colorado delegation will introduce a resolution at Chicago urging unionization.

The reaction of the A. M. A.'s House of Delegates to this resolution will be most interesting.

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Group Practice It is a healthy sign that physicians differ as to how many of our health problems should be solved. There may be, as some critics say, too much talking and too little action. But where matters as vital as health are concerned, every phase of the subject should be explored thoroughly. Some physicians would not be so impatient if they seriously endeavored to inform themselves. For the deeper one delves into the various aspects of maintaining the public health the more complex it becomes.

Let us take, as an example, just one phase of medical care. There has been considerable agitation in many quarters for the general acceptance of group practice as the remedy for some of the defects in the present system of providing medical care. There is undoubtedly much to be said for such practice, and the medical profession would perhaps be wise to experiment with it on a more ambitious scale than heretofore, particularly for individuals in the lower income group.

Reference is made editorially to group practice in the December, 1943 issue of the *West Virginia Medical Journal.* It seems that the West Virginia Medical Association's Fact Finding Committee has recently made its report on the medical situation in that state. The editorial reads in part as follows:

"The Committee has met and adequately dealt with the most onerous problem in medical care—the unexpected and hospital-confining illness. As was said in a recent radio debate on the cost of medical care: this is meeting first things first. Prepayment hospital insurance is perhaps the one thing that organized medicine can universally adopt to aid the low income group in getting better, more adequate medical service.

"There is another group of patients who also merit much consideration: that group of patients who wander from office to office suffering from something that is not entirely disabling and necessitating hospitalization but who find themselves in spite of numerous consultations 'getting no better fast.' These are the so-called chronics. They go to the general practitioner and are referred to the eye, ear, nose and throat men, to the urologist, to the orthopedist, to the radiologist, etc. The cost of these different examinations mounts high. The investigations and treatments of the various specialists are uncoördinated, costly and inefficient.

"All in all, it is possible that the financial and economical burden on these people is as great if not greater than that of the group which requires hospitalization.

We venture to suggest that the organization of diagnostic group clinics in the various communities would supply these patients with more efficient and less expensive medical care and might perhaps increase rather than decrease the doctor's income. The general practitioner has nothing to lose and much to gain from such groups. In theory, most doctors agree to the feasibility of group practice. Why it is not more universally employed is somewhat of a mystery. All doctors on hospital staffs and all doctors in the armed services are practicing group medicine. It remains to be seen how long medicine, as practiced today, can escape the logic of group practice."

Dr. J. Russell Verbrycke, Jr. of Washington, D. C., well known to nearly all physicians in the District, discusses this subject in the January, 1944 issue of *Medical Economics* under the title, "What Does Group Practice Offer the Doctor?" Dr. Verbrycke points out the advantages of group practice which he says are, under the most favorable circumstances, considerable. However, he concludes his article by listing some of the disadvantages. They are, according to Dr. Verbrycke, as follows:

"First, there is the loss of friendship of some of his confreres outside the group. The more prominent the group the greater will be the jealousy of others, even if unjust. Patients will in most instances come to the group direct; the individual member will not have patients referred to him by outside practitioners as he would in private practice.

"Second, a physician may have his professional growth inhibited and brought down to the average of the rest of the group. Practicing as an individual, on the other hand, he might forge ahead more rapidly.

"Third, there may in smaller groups be only limited choice of consultants. Even if the community has some truly prominent specialists, the tendency is to avoid consultng with them if they are not members of the group.

"Fourth and fifth, there may be mental dissatisfaction because of interference with one's individualism or because of internal strife with one's associates. More trouble arises on these two grounds than on any other; and the reasons can readily be seen: The physician, in a way, is temperamental, he is confident of his own ability; he is likely to be intolerant of criticism; and above all he is an individualist. He does not naturally work well in harness or under restraint. These characteristics alone encourage discord among members of a group. Another thorn begins to prick when attempts are made to adjust the income in correct proportions. Conditions are constantly changing and no man's value is quite the same from year to year.

"The faults of group practice from the patient's standpoint have been stated as three. The first is perhaps the most important: namely, the loss of intimate contact with one's own physician. The person as a whole may be the object which requires treatment and not necessarily a disease. Since the patient may, and does, take the most personal problems to the physician for his help and guidance, a close relationship may be essential in effecting a cure. Deposited within the machinery of a group, however, the patient may draw into his shell, so that neither the X-ray, nor the blood chemistry will disclose the cause of his maladjustment.

"The second disadvantage claimed for the patient has already been considered in a different category. It is—too much routine for unimportant cases.

"The third disadvantage does not perhaps apply often, yet when present it is a vital factor: In a very difficult case the best possible specialist may not be a member of the group. Nor can the patient call him without leaving the group completely."

There you have it. Your Observer feels certain that there are many physicians in Washington who would like to express themselves on this important subject. Why not let us have your views? They may prove very helpful to your colleagues.

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"Stung by . . . Inability or Unwillingness"

Apparently the medical profession is to have a Washington office. Unfortunately, it will not be sponsored by the American Medical Association nor will it claim to represent physicians throughout the country. The reason for this situation is stated in a letter addressed to secretaries of state medical societies by John Hunton, Executive Secretary of the California Medical Association. Mr. Hunton says:

"Stung by the apparent inability or unwillingness of national organizations to establish Washington offices for the handling of medical information, representatives of six western state medical associations voted on December 11 to set up their own information bureau in the national capital."

A resolution adopted by representatives of Arizona, California, Colorado, Idaho, Oregon and Utah medical associations at a Salt Lake City meeting held on December 11, 1943 to which eleven western state societies were invited was enclosed with Mr. Hunton's letter. The resolution states:

> "It is the sense of the representatives of the western state medical associations that an organization be created to maintain a service bureau in Washington, D. C., for the purpose of informing governmental agencies and representatives with regard to public health matters affecting the western states and to inform the medical profession of all federal government activities affecting the profession."

An invitation was extended to other state medical associations to join with the western states in the organization, which will be known for the time being as the "Western States Public Health League." Funds to maintain the office are to be raised by per capita membership payment.

That this action was deemed necessary by the states involved is to be regretted. Certainly it will prove embarrassing and perhaps detrimental to have more spokesmen in Washington.

★

Our Most Valuable Asset "Every child is a history of the race beginning again, entitled to a chance to become its best." Few are capable of making a more eloquent plea for our children than Dr. Harvey F. Garrison, of Jackson, Mississippi. Last November he spoke at length on this subject to the Southern Medical Association, of which he is the President.

In his opening remarks Dr. Garrison said:

> "There are approximately thirty-six million children in our nation. These are the future citizens of the United States. Among them are our physicians, lawyers, engineers, statesmen, ministers and teachers of the future. Among them also are our rank-and-file citizens who form the backbone of any society.
>
> "During this war period, it is perhaps difficult for us to look ahead to the time when these children of today will have taken their places; however, there is no more important time to look ahead than today when too many minds are pointed merely to the manifold problems of the day. The thirty-six million children of America are our nation's most valuable asset, and we must realize its greatest problem as well. They are an asset in that they hold the potential power and greatness of our nation; they are a problem in that the care and training which they will receive within the period of childhood will make them and our nation with them superior or inferior."

★

Why Do They Do It? There is nothing more disturbing to an audience than being unable to hear a speaker or to see charts, slides and objects intended to clarify and make effective his presentation. Medical audiences may not ordinarily be the politest but they are certainly the most patient. They will sit through lengthy scientific discussions even though much of what the speaker has to say is lost to them because of his failure to make himself heard. Surprisingly they seldom remonstrate even when slides which are used to illustrate remarks cannot be read except by those nearest the screen.

Your Observer has attended medical meetings for more than twenty years. He is still amazed at the number of physicians who, when addressing their colleagues, have the audacity to show slides packed with text matter which is never seen in larger auditoriums. It is not only distressing but it is evidence that the individual preparing the slides has used exceedingly poor judgment. Infrequently a speaker will show consideration for his audience by having had sufficiently large type used in making slides, but he is an exception rather than the rule.

A few weeks ago a well-known physician spoke in Washington on a scientific subject of vital interest to his colleagues. He showed numerous slides. Not one of them could be seen half-way back in the auditorium. His remarks were of such a nature that without being able to see the slides they meant very little to most of his audience. Yet there was surprisingly little complaint.

Medical societies might well insist that slides used by speakers be adapted to auditoriums in which they are to be shown and conform to certain standards as to size of graphs, figures and letters.

Need it be said that this is your Observer's pet peeve?

★

On Being a Hero

Of what stuff are heroes made? A Lieutenant Commander in the Medical Corps of the Navy gave an answer to that question recently when he visited your Observer's office. This medical officer has seen combat duty. There were rows of ribbons on his tunic and not a few stars indicating that he had taken part in several engagements. This was mentioned to him during our conversation and he said, "Oh, those do not mean much." He reminded me that being a hero was pretty much of an accident. Unless one is on the spot when things are happening, he argued, there is no opportunity to demonstrate skill or bravery. Most men in the military services, he said, are so well trained in their tasks that they perform them without regard to the circumstances. He reiterated again that it was only by chance that one was on hand when the unusual occurred. Thousands serve throughout the war without seeing action of any kind. He himself had been on a destroyer which had fought it out with a submarine. He spoke of it casually and said that if anyone else had been in his place, he would have cared for the wounded without thinking of it as anything out of the ordinary. Regardless of battle conditions, it would have been all in a day's work.

There is undoubtedly some truth in what the Commander said. The fact is, of course, that brave men are usually modest.

16th Annual Scientific Assembly

Although the 16th ANNUAL SCIENTIFIC ASSEMBLY is nearly ten months away, plans for the meeting are well advanced. The ASSEMBLY is scheduled for October 5, 6 and 7 at the Mayflower Hotel, Washington. The theme this year, "A Preview of Postwar Medicine," indicates the ambitious scope of the scientific program which the Committee on Arrangements hopes to make one of the best in the ASSEMBLY's history. Dr. Arnold H. McNitt will again be General Chairman. The Vice Chairman of the Committee is Dr. W. Ross Morris.

The ASSEMBLY has come to the front rapidly in recent years. In the opinion of those who have been associated with its organization, it has still greater possibilities. This was in the minds of members of the Executive Board when they decided upon the desirability of a more permanent Committee on Arrangements. An experienced Committee, the Board believed, would be capable of making improvements in the ASSEMBLY. The General Chairman will now serve two years, when he will be succeeded by the Vice Chairman. Physicians in other positions will also be asked to serve more than one year.

★

Strike 'em Out

Up in Lockport, New York, there is a group of young people who have original ideas about legislation. Recently the following telegram was received by the Medical Society of the District of Columbia Library:

"PLEASE STRIKE OUT MEDICAL SECTIONS FROM WAGNER MURRAY DINGELL BILL SENATE BILL ONE ONE SIX ONE WE FEEL THESE MEDICAL SECTIONS ARE MOST UNDEMOCRATIC
LOCKPORT JUNIOR SERVICE LEAGUE"

Simple, isn't it?

War Section

ADDITIONS TO THE HONOR ROLL

Through oversight several physicians who have been honorably discharged from service were omitted from the Honor Roll which was published in the December, 1943 issue of the MEDICAL ANNALS. A number of names have also been added to the Roll since that time.

Arthur G. Compton
Charles R. Hughes
Daniel F. Lynch
*Arthur Nachlas
William S. Ritchie
*Murry W. Robinson
*Saul Schwartzbach
Carl Silverman
Morris Silverman
Richard H. Spire
*Joseph W. Stein
James M. Suter

* Honorably discharged from service.

Additional promotions in rank have come to the attention of the Editors of the ANNALS. They are as follows:

Henry L. Bastien, from Captain to Major
Montgomery Blair, Jr., from Major to Lieutenant Colonel
Robert M. Bolton, from Lieutenant Commander to Commander
John Leland Cardwell, from Lieutenant Commander to Commander
William W. Chase, from Major to Lieutenant Colonel
George Dewey, from Major to Lieutenant Colonel
Richard L. Jackson, from First Lieutenant to Captain
Morris Kleinerman, from First Lieutenant to Captain
Marshall deG. Ruffin, from First Lieutenant to Captain

LETTERS FROM PHYSICIANS IN THE SERVICES

Publication of letters from Washington physicians with the armed forces is resumed in this issue of the MEDICAL ANNALS. Hereafter they will appear regularly, our medical officers in this country and overseas apparently finding them as interesting as physicians at home.

Editors of the MEDICAL ANNALS feel certain that readers will agree that the communications which follow are among the best that have been published.

From Captain George W. Reeves, ℅ Postmaster, New York, N. Y.:

Dear Mr. Wiprud: Every time I get a letter from you, I feel guilty that I have failed to write you one. This is especially true as from the addresses given in your letter and the letters published in the MEDICAL ANNALS, no one seems to have written you from the C. B. I. (China, Burma, India) theater. I am writing you this from somewhere in China. Your last letter arrived on Thanksgiving Day after I had just finished a 30-mile trip by pack mule in the rain to see some sick personnel stuck up in the hills. Needless to say, I did not waste much sympathy on your description of the transportation difficulties in Washington. Your December 4th letter came today and I want to write you before another letter from you comes in. Before I finish, you will undoubtedly wish there was a typewriter handy for me to use.

As far as I know, I am the only Washington physician in this theater—I have not run in to any others nor heard of any others. I belong to a Field Hospital unit, composed largely of Chinese-American physicians and dentists and enlisted men, and a number of Chinese-speaking American physicians. I am one of the few non-Chinese speaking (physicians). Our unit left the States last May. We spent a couple of months in India, then came into China. We were split up into 3 groups to give medical service to the Chinese army. Each of the three groups acts as a Base Hospital. The Chinese Divisional Hospitals evacuate to us. This sounds very good, but when I tell you that our Base Hospital consists of 4 medical officers, 1 dental officer and 57 men and 5 Chinese women, a portable fluoroscope, and the laboratory of one microscope with Wright stain only (not even any Benedict solution) it is not so good. We have great difficulty in getting supplies, as does everyone in China.

Aside from our own shortage of materials we have several other problems. The Chinese furnish us with beds and bedding. The beds consist of boards put on trestles. The bedding consists of one cotton quilt and one mattress cover stuffed with rice-paddy-straw for each bed—no more. If that is soiled, it is just too bad. The bedding does not get washed nor deloused unless the bed stays empty for 24 hours after the last patient has left—and that seldom occurs. The patients are necessarily put to bed with their clothing on, as it is cold here and as they have only one suit of clothing, that doesn't get washed or deloused either. Our patients are also fed by the Chinese army. The diet of the Chinese soldier consists of 22 ounces of rice per man per day—nothing else—no meat, no vegetables. The sick men in the hospital, as a special concession, get a small dish of green vegetables once daily—but still no meat. About 2 out of 10 of our patients on admission have a nutritional edema, from protein deficiency, but after a febrile illness (I suppose they burn up a lot of body proteins with the fever) about 6 out of 10 have it on discharge. Sometimes I feel I would rather have food for them than drugs. Ten out of 10 of our patients have lice, and about 8 out of 10 have scabies. Our most common disease is Relapsing Fever (louse-borne) followed by Malaria. Believe we have some typhus but it is impossible to diagnose the rash on a body covered by scabies, lice bites and scratch marks. Quite a few of our febrile cases remain undiagnosed because of meager laboratory facilities, so we just label them "sick" and let it go at that. Our most common surgical condition is an ulcer of the foot about the size of an orange, caused by abrasions from wearing grass sandals that become secondarily infected. We have been quite successful in cleaning them up and grafting them. Our major surgery has been very successful except that I believe we get more eviscerations than we should, and I wonder if it is not due to low serum proteins—sure would love a chance to work it out. They just don't seem to heal as they should.

This hospital has its humorous aspects also. Most of our patients have never seen a doctor or a hospital before. One chewed up a thermometer and swallowed it (he thought it was medicine). Many of them bring their own stock of herbs and take them on the sly. The most usual complaint on history taking is "my heart hurts." History taking through an interpreter is quite an experience anyway. You ask the interpreter to ask the patient how long he has been ill. There ensues a conversation between the two lasting for 5 minutes with much gesticulation and rising voices until you think they are coming to blows. Then the interpreter turns to you and says, "He says he has a headache." You say, "Is that all he said?" Answer: "Yes." You: "How long has he been sick?" Answer: "He says he has a headache." So my histories are quite meager.

On reading this over, it sounds like I am complaining. I am not. The difficulties we encounter, especially with supplies, are not anybody's fault. Lord knows you folks back home are producing plenty and sending plenty abroad, but the problem of transportation of these into China is tremendous. Even so, I believe that we are doing about as much good here as we could elsewhere but we could do better if given the opportunity.

The war has not come close to me. We have air activity—had a view of one air raid that was as good as a seat on the third base line at a World Series game. The Japs took an awful beating—they lost 16 and we lost only one, and got that pilot back. Saw 6 go down myself. Where we are now, the Japs go over once in a while and we run and jump in our fox holes but they never bomb us. Guess they think we aren't worth it—and I don't care if they don't.

About the elections and postgraduate education and securing offices when we return—am sure that all Washington physicians overseas can confidently leave these matters in your hands and the hands of the physicians on the Washington home front. I know that when we return, we will be given a helping hand, full coöperation, and that our interests will have been taken care of while we were away.

From Major Philip Litvin, Station Hospital, Camp Hulen, Texas:

My dear Mr. Wiprud: I certainly enjoyed receiving the newsy letter about all the activities of the men who are in the Medical Society. I have not been quite as fortunate as you have in being able to keep in touch with some of the men. I have heard only remotely that some of them are close by, but as you know, distances in Texas are vast and close by may mean somewhere from five hundred to one thousand miles.

As you probably know by now, the Army has instituted a series of courses which, for all practical purposes, are postgraduate courses in medicine. These consist of discussions of cases on the order that are published in the *New England Journal of Medicine* and somewhat on the order of the Clinical Pathological Conferences that are held in the various hospitals. If you are interested, I should be glad to send you some copies of these cases with the mimeographed discussion. It will not be any imposition, so do not hesitate to let me know.

Your notation about the discussion between yourself, Father McCauley, Dr. Bloedorn and Dr. Macatee was most interesting. As you know, when men get together, they start talking about what the future will hold for them and that applies equally as well to those in the Army. Here we rub elbows with men who come from various states, and some of them are beginning to wonder how many private practices are going to be left when the war is over. Some of the men who are practicing out in the outlying states are not particularly afraid of social medicine. As a matter of fact, in some of the smaller communities several of the men expressed desire that they would welcome it, since it would mean a guaranteed income for them.

I for one have been fairly fortunate at being able to remain in a hospital doing my own specialty, namely, neuropsychiatry, and it would not be difficult to go back and pick up practice where I left off, but for those doctors who are in the field and who have not been able to remain in hospitals, it would seem that there is quite a lot of brushing up to be done. It would seem that first of all these men have not had the opportunity to see or treat any women or children or to see or treat the diseases at the two extremes of life, namely the "before 18" and "after 45." It would therefore seem that if courses are to be arranged after the war, they should be so arranged that those men who are going back to do general work be given an opportunity to study the diseases of that age group particularly.

As you know, there will be a lot of men who will not be interested in going back to general practice, and those particular men should be given an opportunity to study in their own specialty. It would be a marvelous opportunity for the medical schools concerned to be able to offer those courses for them. There is certainly ample clinical material available in Washington to do this.

Your notation about the Army Widows' Night is a very laudable one and I am sure those of us whose wives and families have had to remain will welcome the opportunity of continuing to feel that their remaining colleagues are still thinking of them.

From Captain John T. Schnebley, ℅ Postmaster, New York, N. Y.:

Dear Mr. Wiprud: Have been getting your excellent letters regularly and appreciate them no end.

Looking over the list I'm probably the only one from our fair city in this neck of the woods for which they may be thankful. Aside from the bitter cold and the lack of family contact we have all the comforts of home indoors.

It seems that the psychiatrists decided that the only way to determine to which climate a man was to be sent was to ask him in a questionnaire whether he liked hot or cold weather. I'm one of those who found out they weren't fooling when they made it *hot* or *cold*.

At least I can claim membership in the Polar Bear Club—a questionable honor at least at the present writing.

I'm awfully glad that our good friend and worthy ophthalmologist J. N. Greear, Jr. was given his initial silver leaf, for I know the army is rather sparing of them. Please keep me on the mailing list.

From Captain Max E. Feldman, ℅ Postmaster, New York, N. Y.:

Dear Mr. Secretary: From time to time I have received the Society's magazine and letters and in nearly a year's duty overseas, they have been very welcome. I have enjoyed reading the articles by Society members, many of whom I know, and also your extracts of Society friends' letters from other overseas military stations. I guess the physicians back home really have their hands full, especially now with the winter respiratory diseases in full swing. I have been all across the top of Africa and have been in Italy for three months. The more I see of this war here, I am thankful and we should all be thankful that the war is not being fought on the doorsteps of our own families, and that it is far better that millions of us go overseas to war than it come home to us. Thank you again for the publications I have received. If I am in arrears on dues, I will make them up on my return.

From Captain Daniel Sondheimer, ℅ Postmaster, New York, N. Y.:

Dear Mr. Wiprud: Today I received the card from the Society which has conveyed greetings of the season to me abroad. Mr. Wiprud, it is such things that enable us to go on in this seemingly endless task, knowing that back home are people who are thinking of us always. The sentiment expressed is certainly appreciated, and I want you to know that the wishes for a Merry Xmas and Happy New Year for you and all members of the Society is hereby extended. Since you last heard from me, I have been transferred to a Station Hospital and have had the opportunity to return to the surgery to which I have devoted my life. It was a wonderful break and I'm doing my best to make use of it. Xmas here will be a very quiet one with a little party being given by the Red Cross for the doctors and nurses. Most likely the only spirits available will be French wine, but, with the liquor shortage back in the States, I suppose you will be forced to visit the nearest speakeasy. Give my best wishes to Drs. Sanderson and Schreiber and to all of my friends of the Society. Thanks again for remembering me.

From Captain Michael P. DeVito, ℅ Postmaster, New York, N. Y.:

Dear Mr. Wiprud: Your letter of October 19 reached me with encouraging and enlightening news as always. Here in England we are doing as always—living with the Army. However at the present time we mingle with age as we are residing in a castle. Beautiful is not the word. The surroundings are magnificent. Hunting, fishing just outside the door. The grounds, well they are comparable to our beautiful spots in our country. In fact many of the trees are ours from home. The English do things in a big way I must admit. In fact since my association with them my feelings and opinions have swung completely to the other side. One must admire spirit, courage and the will to win no matter what one may think. Such they have proven to the world, why the English have been able to stay put. We entered this thing with our eyes open but they surely have kept them open for us. Together as such the sailing will be a mere jaunt. We may strike a rough spot but the cards are now stacked and time shortly will bear me out. Another year, a mere three hundred and sixty-five days and I expect to be back. What then! Probably once again to work or maybe Uncle Sam may still have a mortgage on me.

So I leave you at this time with best wishes to you and all the Society for the coming holidays, until your next chapter I remain as always, Michael.

From Major Victor R. Alfaro, England General Hospital, Atlantic City, N. J.:

Dear Ted: Your December 4 letter was received by me with the same pleasure of all your previous. It's great to get the news from all our colleagues overseas and at home. I am looking forward to a short visit in Washington around New Years, and, if time permits, will drop by to say hello!

Needless to say, those of us who have not seen overseas duty have not suffered the nostalgia of the ones who have. We all hope to go across however at some time, and no doubt we will have the chance.

I am still in charge of E. N. T. at this hospital which has been a general hospital since August. We are doing essentially the same type of work as before in every department; however since the bulk of our patients are from overseas now, the orthopedic and psychiatric services have increased materially. It has been so far a very pleasant assignment.

With Jim Greear in the army what will you do about the presidency next year? I suppose the V. P. will take over.

You are no doubt interested in what the doctors are thinking about the practice of medicine after the war. It's a tremendous problem undoubtedly. As you point out the Navy will keep large numbers for good. *So will the Army!* Certainly for a number of years; for this group of course there's no choice and therefore no problem since they will in one way or another have made their adjustment. For those that do return to private practice however all sorts of possibilities suggest themselves.

(1) Return home; course of least resistance, and best chance to get on your feet quickly.

(2) Start fresh in a new community. So many men who come from small towns (gen. practitioners) are thinking of specializing and settling in larger cities. This actually if widespread will cause an imbalance in the distribution of medical care.

(3) Many men are toying with the idea of establishing group practice; an internist meets a surgeon, X-ray man, etc., whose work he likes and with whom he gets along well and they plan on combining forces to offer the public complete medical service at somewhat lower cost than now available. (Many little Mayo Clinics as it were.)

It's all a big problem and the future is as yet so uncertain that one must keep an open and agile mind to make clear decisions when the time comes.

From Lt. Comdr. Reginald H. Mitchell, ℅ Fleet Postmaster, San Francisco, Cal.:

Dear Ted: The other day we were fortunate enough to get some mail and in it was one of your letters and an issue of the ANNALS. I sure enjoyed the letter and the news from home. I have been at sea a year and a half now and miss all the doings around Washington very much. Your letters are so "newsy" and frequently solve many problems like that of registration. Keep up the good work.

I am glad you are publishing the letters you get from others in the service again. I missed them. They all seem like personal letters to each other and is a sort of central meeting place where we all can find out what the others are doing.

Naturally censorship regulations forbid me to tell where I am or what we are doing. The main thing is we have been

(*Continued on page 88*)

CALENDAR OF MEETINGS

January 7	Grievance Committee
January 12	Scientific Meeting of Society Section on Pathology Subcommittee on Child Welfare
January 14	Procurement and Assignment Committee
January 18	Board of Censors
January 20	Program Committee of Interprofessional Conference
January 21	Committee on Medical Economics
January 24	Executive Board
January 26	Scientific Meeting of Society
January 27	Committee on Postgraduate Education
January 31	Subcommittee of the Committee on Medical Economics

WOMAN'S AUXILIARY NOTES

On December 7, 1943, the Woman's Auxiliary to the Medical Society of the District of Columbia held a very successful luncheon and "white elephant" sale, for the benefit of their philanthropic fund, in the Library of the Medical Society's building. Arrangements for the luncheon were made by a committee under the direction of Mrs. John J. Shugrue.

The next day, at the regular meeting of the Auxiliary, Dr. Henry C. Macatee spoke on "National Health Legislation." Dr. Macatee, a Past President of the Medical Society, has been identified with organized medicine for approximately thirty years. He gave a splendid talk, and his kindness in so doing in these busy times was fully appreciated.

Dr. Tibor Kerekes spoke on "Current Topics" at the January meeting. Dr. Kerekes is a native of Hungary and holds degrees from the Universities of Budapest and Vienna. For the past seventeen years he has been Professor of History at Georgetown University.

Generous donations were made by the Auxiliary to the In-Bed Club of the Washington Heart Association and also to the District of Columbia Tuberculosis Association. Mrs. James H. Greear, Jr., assisted by members of the Philanthropic Committee and other members of the Auxiliary, sold Tuberculosis Seals at the Washington Loan and Trust Company booth from December 1 through December 22.

Mrs. Joseph L. Gilbert has accepted the chairmanship of a committee which will work with Dr. W. Calhoun Stirling on the Fourth War Loan Drive. Mrs. Harry S. Lewis has been appointed chairman of the Finance Committee, and Mrs. Don R. Johnson was appointed chairman of the Public Relations Committee.

Mrs. Edgar E. Quayle
Publicity Chairman

MEETINGS

Wednesday, March 1

Business Meeting

Wednesday, March 15

The Syphilis Journal Club will sponsor the following program:

1. "The National Aspects of Venereal Disease Control," J. R. Heller, Jr., M.D., Chief, Division of Venereal Diseases, United States Public Health Service
2. "Impressions Concerning Rapid Treatment of Syphilis," Udo J. Wile, M.D., F.A.C.P., Professor of Dermatology and Syphilology, University of Michigan; Medical Director, U. S. P. H. S. School of Public Health, Ann Arbor, Michigan
3. "Some Local Problems in Venereal Disease Control," Frererick G. Gillick, M.D., Director, Bureau of Venereal Diseases, D. C. Health Department
4. "Report of the Work Being Done at the Gallinger Center," Sidney Olansky, M.D., Chief, Rapid Therapy Center, Gallinger Municipal Hospital
5. Kodachrome films of "Lesions of Syphilis Before and After Rapid Therapy," John L. Parks, M.D., Adjunct Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine and Georgetown University School of Medicine

Wednesday, March 29

The Section on Ophthalmology and Otolaryngology will sponsor the program. Speakers and titles of papers will be announced.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the business meeting, January 12, 1944:

Active Members

Abraham Robert Abarbanel, 1726 Eye Street, N.W.
Philip S. Arthur, 2205 42nd Street, N.W.
Ervin Newton Chapman, 1st Lt., M.C., A.U.S., 1901 Wyoming Avenue, N.W.
Frederick Young Donn, Jr., 4800 8th Street, N.W.
John Francis Donohue, 1st Lt., M.C., A.U.S., Carlisle Barracks, Pa.
Harold Y. Finck, 2910 Naylor Road, S.E.
Milton L. Goldman, 2238 Que Street, N.W.
Roy George Klepser, 1150 Connecticut Avenue, N.W.
Vasilios Simos Lambros, 7720 14th Street, N.W.
John William Mahoney, Gallinger Municipal Hospital
Benjamin L. Naiman, 3220 17th Street, N.W.
Rufus Martin Roll, 1835 Eye Street, N.W.
Robert C. Rush, 1835 Eye Street, N.W.
Erich Wilhelm Schwartze, 1225 Talbert Street, S.E.
Myer Harold Stolar, 2913 M Street, N.W.
Reuben Edwin Stone, 3417 Minnesota Avenue, S.E.
Amanda Louise Stoughton, 1129 Vermont Avenue, N.W.
William Robert Stovall, 3419 Morrison Street, N.W.
James M. Suter, Major, M.C., A.U.S., Station Hospital, Fort Eustis, Va.
Lawrence J. Thomas, 5623 Kansas Avenue, N.W.
Geneva Dye Turner, 1835 Eye Street, N.W.
Leila Hulbert Wells, 3848 Porter Street, N.W.

Associate Member

Leigh Cole Fairbank, D.D.S., 1726 Eye Street, N.W.

Recent changes in membership status:

Resigned
Active Member

May D. Baker

Associate Member

John R. DeFarges

Six New Life Members

Chapter II, Article IV, of the Constitution of the Society, reads as follows:

> Life members shall be active members who have been active members for a total of forty years. They shall have all of the privileges of active membership and shall be exempt from paying dues and assessments.

Our honor roll now numbers 64. The congratulations of the Society are extended to:

Seniority Number		*Date of Membership*
321	Simon R. Karpeles	April 9, 1903
323	Oscar Wilkinson	April 13, 1903
324	Truman Abbe	April 15, 1903
325	Francis S. Machen	April 15, 1903
334	Harry M. Kaufman	November 2 1903
336	Mary Holmes	November 5, 1903

who have for forty years been on the roster, meeting all dues and assessments and lending their support to the Society by frequent attendance. Their status is now elevated to Life Membership.

On The Home Front

The American College of Surgeons is holding twenty-two one-day **War Sessions** in cities throughout the United States and Canada during March and April, 1944. Advancements in military medicine and developments in civilian medical research and practice under the spur of the war emergency will be presented by authorities representing governmental agencies and by civilian physicians and surgeons. The meetings will be open to the profession at large, including medical officers of the Army and the Navy, residents, interns, medical students, and executive personnel in hospitals. For the latter, special hospital conferences are being arranged. The War Session for Maryland, Virginia and the District of Columbia will convene at the Lord Baltimore Hotel, Baltimore, Friday, March 24, at 8:30 a.m.

The Seventh Annual Postgraduate Course in Ocular Surgery, Pathology and Orthoptics of the George Washington University School of Medicine will be held April 24 to 29. Instructors in the course are as follows:

PATHOLOGY: Colonel J. E. Ash, M.C., U.S.A., Curator, Army Medical Museum; Major Alfred Golden, M.C., U.S.A.; Helenor Wilder and Lawrence Ambrogi.

ORTHOPTICS: Dr. William Thornwall Davis, Dr. Ernest Sheppard, Dr. Frank D. Costenbader, Louisa Wells, Mary E. Kramer, Dorothy R. Bair and Mildred Brown.

SURGERY: Drs. Davis, Sheppard, E. Leonard Goodman, Ronald A. Cox, Sterling Bockoven, Richard W. Wilkinson and C. R. Naples.

Registration is limited to 30. The fee for the course is $150, with $50 payable with registration, the remainder payable on matriculation. The Washington Hotel has reserved rooms for the registrants. Further information may be secured by writing to Miss Louisa Wells, 927 17th Street, N.W., Washington, D. C.

The Department of Otolaryngology of the University of Illinois College of Medicine has scheduled its spring refresher course for March 20 to 25 at the College in Chicago. This course is intended primarily for specialists who, under existing conditions, are able to devote only a brief period to postgraduate review study. The fee is $50. Complete information may be secured from the Department of Otolaryngology, University of Illinois College of Medicine, 1853 West Polk Street, Chicago.

The American Urological Association offers its annual award "not to exceed $500" for an essay on the result of some specific clinical or laboratory research in urology. The amount of the prize is based on the merits of the work presented, and if the Committee on Scientific Research deems none of the offerings worthy, no award will be made. Competitors shall be limited to residents in urology in recognized hospitals and to urologists who have been in such specified practice for not more than five years. Full particulars may be secured from the Secretary, Dr. Thomas D. Moore, 899 Madison Avenue, Memphis, Tenn. Essays must be in his hands on or before March 15, 1944.

The selected essay will be presented at the program of the forthcoming meeting of the American Urological Association in St. Louis, Missouri, June 19 to 22.

The Baltimore-Washington Dermatological Society will entertain the Atlantic Conference of Dermatologists at the Georgetown University School of Medicine, February 26. The meeting will be followed by a banquet at the Statler Hotel.

The National Conference on Social Security, held at the U. S. Chamber of Commerce Building, January 10–11, devoted its second afternoon session to medical aspects of health insurance plans. Among the speakers were Dr. Allan M. Butler, Associate Professor of Pediatrics, Harvard Medical School; Reinhard A. Hohaus, Associate Actuary, Metropolitan Life Insurance Company; C. Rufus Rorem, Director, Hospital Service Plan Commission, American Hospital Association; and Dr. Louis H. Bauer, Chairman, Council on Medical Service and Public Relations, American Medical Association.

The George Washington University Medical Society held its Wartime Victory Dinner and Alumni Reunion at the Mayflower Hotel, February 19. Lt. General Alexander A. Vandergrift, Commandant of the U. S. Marine Corps, was the principal speaker.

On January 15 the Society heard an address by Dr. Harrison F. Flippin, Associate in Medicine, University of Pennsylvania, on "The Treatment of Pneumonia." Lt. Comdr. James M. Ruegsegger, M.C., U.S.N.R., of the National Naval Medical Center, and Dr. Harry F. Dowling, Clinical Professor of Medicine, George Washington University School of Medicine, led the discussion.

Major General Norman T. Kirk, Surgeon General of the U. S. Army, addressed members of the **Clinico-Pathological Society** at their regular meeting, February 1, held at the home of Dr. Charles P. Howze.

Dr. Matthew White Perry addressed the Society, January 11. He related some of his experiences on his trip to Moscow with the Secretary of State Hull. Dr. H. H. Kerr was host at the meeting, which was held at the Metropolitan Club.

The first Hospital Corps School for enlisted members of the Women's Reserve, U. S. Naval Reserve, was opened January 12 at the National Naval Medical Center, Bethesda, Md. The new school has a capacity of 480. A four weeks' course will be given to the women enrolled.

The Section on Gastroenterology held a dinner meeting at the Wardman Park Hotel, January 10. Lt. Comdr. W. T. Gibbs, Jr., M.C., U.S.N.R., of the U. S. Naval Hospital, Bethesda, Md., read a paper on "Nonsurgical Jaundice." His paper was discussed by Drs. James F. Mitchell and Paul F. Dickens.

The American College of Surgeons has included 18 District hospitals on its approved list for 1943. They are as follows: Eastern Dispensary and Casualty, Children's, Columbia Hospital for Women, Doctors, Central Dispensary and Emergency, Episcopal Eye, Ear and Throat, Freedmen's, Gallinger Municipal, Garfield, Georgetown University, George Washington University, National Homeopathic, Providence, Saint Elizabeths, Sibley, U. S. Soldiers' Home, Veterans Administration Facility and Washington Sanitarium.

Rear Admiral Ross T. McIntire, Surgeon General of the U. S. Navy, was promoted to the temporary rank of Vice Admiral by President Roosevelt, February 2. Admiral McIntire has served as Chief of the Bureau of Medicine and Surgery since December 1, 1938, and as personal physician to the President since 1935.

Dr. Charles B. Campbell, Chairman of the Public Health Committee of the Federation of Citizens' Associations of the District of Columbia, was awarded the Evening Star Trophy for outstanding civic work. Dr. Campbell is one of the Society's delegates to the Federation.

Colonel Daniel L. Borden, M.C., U.S.A., gave the graduation address at La Junta Army Air Field, La Junta, Colorado, January 7. Among the graduates was Colonel Borden's son, Charles Borden, who has been receiving training as a bomber pilot.

Lt. Ellis April, M.C., A.U.S., was recently elected a Fellow of the American College of Allergists.

Captain Allen S. Cross, M.C., A.U.S., who has just returned from an African assignment, visited the Society's office, January 18. Captain Cross is now stationed at Camp Patrick Henry, Newport News, Va.

Dr. Frank D. Costenbader, Vice Chairman of the Society's Committee on Medical Economics, **Dr. Frank J. Eichenlaub and Theodore Wiprud,** member and Secretary of the Committee, respectively, attended meetings of the Medical Service Plans Council of America, held at the Palmer House, Chicago, February 12, and the National Conference on Medical Service, also held in Chicago, February 13.

Dr. L. H. Reichelderfer has been elected Second Vice President of the Board of Directors of Garfield Memorial Hospital.

The Social Hygiene Society held its annual meeting, February 1, with Dr. H. H. Hazen, President of the Society, presiding. Among the speakers was Dr. Winfred Overholser, who discussed various aspects of "wartime delinquency."

Dr. Bernard J. Gurwin gave the first of a series of ten weekly lectures, January 5, in the Dispensary of the Episcopal Eye, Ear and Throat Hospital. His subject was "Eye Diseases and Their Social Implications." The lecture course, which has been arranged for a group of social workers, is being sponsored by the District Society for the Prevention of Blindness.

Dr. Paul C. Barton has been appointed Acting Executive Officer of Procurement and Assignment Service in place of **Dr. M. E. Lapham,** who is ill and will not be able to attend to his duties for an indefinite period.

Dr. G. Haven Mankin was appointed Delegate to the Federation of Citizens' Associations of the District of Columbia by the Executive Board, November 29, 1943, replacing **Dr. Edgar M. McPeak,** who has resigned.

Malcolm G. Gibbs, Phar. D., President and founder of Peoples Drug Stores, Inc., died January 26, 1944, at Casualty Hospital following a brief illness.

Dr. Gibbs was born in Union City, Tenn., September 20, 1878. He came to Washington in 1899, and graduated from the National College of Pharmacy (now a part of George Washington University) in 1902. In 1905 he opened his first store at 824 Seventeenth Street, N.W. As the business flourished new stores were opened, until now there are 130 drugstores located in Washington, D. C., and suburbs, and throughout Maryland, Virginia, West Virginia, Tennessee, Pennsylvania and Ohio.

He is survived by one son, Lt. Colonel Henry F. Gibbs of Washington, and two brothers, Harry D. Gibbs of Union City, Tenn., and Alphonso Gibbs of Thompson, Tenn. Dr. Gibbs lived at the Kennedy-Warren Apartments.

BOOK REVIEWS

Operating Room Technique. Edythe Louise Alexander, R. N., Supervisor of Operating Rooms of Roosevelt Hospital, New York; formerly Supervisor of Operating Rooms, Mountainside Hospital, Montclair, N. J.; Supervisor of Private Pavilion Operating Rooms, New York Hospital, New York. Pp. 392, with 221 illustrations. Price, cloth, $3.75. St. Louis: Mosby, 1943.

This text offers a description of the set-ups, the handling of the patient and use of the instruments, sutures and all other equipment necessary in practically all of the accepted standard surgical, gynecologic, urologic, reconstructive, orthopedic and neurosurgical operations. Each section is arranged in such a manner as to present the principles of the operation, the procedure in numerical order, and the types of instruments and sutures necessary for each step. This is a very valuable program for it helps to unify surgical methods. As has been frequently said by many surgeons, "a standard, well-developed, accepted technique, followed by many, will lead to uniformity and good results." The book is profusely illustrated. The illustrations are particularly good of the different surgical instruments.

A book like this is very timely at this particular date, for now with the shortage of a well-trained nursing staff, it will certainly be an advantage to have a standard method or a technic which offers a standard method for use in hospitals. The reviewer recommends this book to be used by more hospitals, particularly the smaller ones, so that they can have a reference text for all operating room technics.

J. J. W.

Medical Parasitology. James T. Culbertson, Assistant Professor of Bacteriology, College of Physicians and Surgeons, Columbia University. Pp. 285. Price, cloth, $4.25. New York: Columbia, 1942.

In recent years several new texts on parasitology have appeared, and several of the older texts have been brought up to date. Each author has some specific group of readers in mind; and no one text can be expected to meet the needs of all groups.

Parasitology is readily presented systematically, which greatly increases the interest in and the value of such presentation. The non-medical man must find himself at a great disadvantage in an effort to discuss medical parasitology, especially when he undertakes to carry the discussion through to include treatment, as is evident in the book before us. It might be better to leave out case reports, symptoms, and treatment, thereby saving space.

Regrettable as it is, high magnification photomicrographs are not suitable for illustrating the structure of animal parasites or tissue cells, and some of the plates are accordingly unsatisfactory.

The book is hardly to be considered as "a textbook for medical students and a handbook for medical practitioners."

The list of Books for Reference includes most of the more important texts dealing with the subject.

E. R. W.

Allergy. ERICH URBACH, M.D., Chief of Allergy Service, Jewish Hospital, Philadelphia; Associate in Dermatology, University of Pennsylvania School of Medicine; Member, Board of Regents, American College of Allergists, with the collaboration of PHILIP M. GOTTLIEB, M.D., Associate on Allergy Service, Jewish Hospital, Philadelphia; Instructor in Medicine, University of Pennsylvania School of Medicine; Fellow, American College of Allergists. Pp. 1073, with 400 illustrations. Price, cloth, $12.00. New York: Grune and Stratton, 1943.

This recent volume is a noteworthy addition to the growing list of textbooks on allergy. The 2,262 references contained therein furnish an interesting index of growth in this field. Allergy was unknown in the student days of the older generation of physicians now engaged in practice. It represents one of the newcomers to the family of specialties of which medicine is comprised. Conflicts of opinion have inevitably arisen. Limitations of knowledge have been recognized. Father Time, however, the eternal judge, will issue the final decrees.

The author must have shared in this view when he gave expression to the following statement in the preface: "The clinician must admit, however, that the allergic viewpoint in general and the allergic approach to treatment in particular still encounter rather considerable skepticism among the profession, and that, in fact, the available methods of prophylaxis and therapy of allergic diseases are, to certain extent, inadequate."

The contents are logically divided into three parts. Part One deals with the Fundamentals of Allergy, in ten chapters. Part Two devotes seven chapters to the Etiologic Agents of Allergic Diseases; and Part Three considers the Symptomatology and Therapy of Allergic Diseases, in sixteen chapters.

The general practitioner as well as the specialist will find a most comprehensive discussion of the basic principles of allergy. For the specialist, however, the diagnostic measures will assume a greater importance. The chapter on the "Principles of Treatment" concludes Part One. It lists procedures which have met with general acceptance. It also includes a description of the author's Propeptan Therapy, designed to control hypersensitiveness to food proteins.

The etiologic agents, detailed in Part Two, comprise the inhalants, ingestants, injectants, contactants, physical agents, infectants and parasitic agents. The author belongs to the school of thought which maintains that bacteria, viruses, and fungi in themselves produce states of hypersensitiveness.

In Part Three, which is almost twice as long as either of the preceding parts, full consideration is given to the symptomatology and therapy of the generally accepted allergic diseases. These include vasomotor rhinitis, hayfever, asthma, gastrointestinal allergy, and allergic skin diseases.

Some critics may question, however, the inclusion of alleged allergic diseases of the nervous system, eyes, ear, and of other organs of the body. There comes to mind the accusation of an exasperated clinician when he stated, "You Allergists claim too much."

Dr. Urbach merits the gratitude of the profession for his painstaking collection of contributions to allergy and for his frank and full discussion of conflicting opinions. These will serve as an inspiration and challenge to the young school of Allergists.

H. S. B.

MARY ALMERA PARSONS, M.D.

(1850–1944)

Dr. Mary A. Parsons, the first woman physician to be admitted to membership in the Medical Society of the District of Columbia, died January 12, 1944, in a local hospital, at the age of 93 years.

Born in Colebrook, New Hampshire, May 2, 1850, of Revolutionary stock, Dr. Parsons became a pioneer woman in the medical profession. She graduated from the Robinson Female Seminary, Exeter, N. H., in 1870, and in 1871 entered Howard University. Three years later she received her degree in medicine, the second woman to pass the examinations in that institution. She immediately began active practice in the District of Columbia during the "horse and buggy days" of 1874 and did not retire until she was over 80 years old. She then went out to Hollywood, California, but stayed away only a few months.

After Dr. Parsons was barred from membership in the Medical Society because the Congressional Charter granted membership only to "gentlemen" who practiced medicine and surgery, her friends appealed to Congress and the Charter was amended in 1875, changing the word "gentlemen" to "persons." She was elected a member of the Medical Association of the District of Columbia in 1885. After having failed of election to the Medical Society after three applications, she applied again in July, 1888 and was elected in October of that year. Thirteen years later, in 1901, she held the office of Vice President of the Society, and on January 1, 1929, she became a Life Member. She was the first President of the Women's Medical Society of the District of Columbia, which she helped to organize.

She is survived by a sister-in-law, Mrs. Eliza Parsons of Colebrook, N. H., and two nieces, Mrs. Cushman Parsons, also of Colebrook, and Mrs. Davidson Clarke, of Van Nuys, California.

FRANCIS VERNON ATKINSON, M.D.

(1872–1944)

Dr. Francis V. Atkinson, an Active Member of the Medical Society of the District of Columbia, died December 27, 1943. He resided at 516 A Street, N.E.

Dr. Atkinson was born July 24, 1872, in England. He graduated from George Washington University School of Medicine in June 1915 and served as resident physician at Casualty Hospital the last six months of that year. In 1916 he began active practice in the District of Columbia, continuing his practice until his death.

He held Fellowship in the American Medical Association. He had been affiliated with the Medical Society of the District of Columbia since 1918.

He is survived by his wife, Mrs. Mary Stewart Atkinson.

EDWARD MAX KNECHT, M.D.

(1909–1944)

Dr. Edward M. Knecht, an Active Member of the Medical Society of the District of Columbia, died suddenly February 4, 1944, at his home at 3500 Connecticut Avenue, N.W.

Dr. Knecht was born in Zurich, Switzerland, September 30, 1909, and became a naturalized citizen of the United States in 1935. He graduated from the University of Wisconsin with the degree of Bachelor of Medical Science in 1935 and received the degree, Doctor of Medicine, from Harvard Medical School in 1937.

During 1940 and 1941 he was a member of the United States Army Medical Corps, stationed at Walter Reed Hospital. Following this he practiced medicine in California, then returned to the District of Columbia in 1942 and practiced here until his death.

He was a member of the American Medical Association. He was elected to Active Membership in the District Medical Society early in 1943.

Surviving him are his wife, Mrs. Gloria Knecht, and two young children, Maxine and Mary Knecht. His parents, Mr. and Mrs. Edward Knecht, reside in Sao Paulo, Brazil.

(*Continued from page 57*)

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(*Continued from page 82*)

plenty busy and I am still in one piece. Sea duty is great and the experiences interesting but needless to say I am ready any time to see the States again. I know a good many of us are.

Please remember me to my old friends at home and here's hoping I hear from you again real soon.

MEDICAL ANNALS

of the

DISTRICT OF COLUMBIA

VOLUME XIII — *March, 1944* — NUMBER 3

MEDICAL SERVICE IN INDUSTRY*

PHILIP DRINKER

Chief Health Consultant, United States Maritime Commission; Professor of Industrial Hygiene, Harvard School of Public Health

IN SO far as they pose new medical and health problems, our war industries can be grouped into two broad classes:

1. New plants making new products with green employees.
2. Plants expanded or converted from an established industry with a substantial nucleus of seasoned workers.

New enterprises need doctors more than do those which are an outgrowth or an adaptation. Our large motor car manufacturers have shown what they can do in the way of making tanks; they converted their factories and built additions, but they had an important nucleus of seasoned employees. A piano manufacturer turns to making gliders, and a prominent interior decorator contracts for the inside finish of Maritime Commission merchant ships. Certainly these changes disrupted the peacetime routine, but they did not, in general, pose new medical problems.

Compare these changes with the innovations brought up by completing in a year a shipyard employing 30,000 men of whom virtually none had previous shipbuilding experience. Add to that the housing and feeding of the men and their families and you begin to get some idea of our troubles in the shipbuilding industry.

New industries, such as synthetic rubber, are new creations, but they have not such large numbers of men; the processes are highly technical and highly mechanized. The new engineers who have come into the shipbuilding industry have worked miracles in reducing the man hours needed to build ships, but it is doubtful if there is another war industry in which such large numbers of men are so necessary.

Industry knows perfectly well that doctors are rationed for the duration. We are not complaining, but we want you to understand some of our peculiar troubles. You know what the doctor shortage means to your own hospitals and to general civilian life, but many of you have not been intimately concerned with the problems of industry.

Neither new nor old industries are immune to the draft nor have they acquired any resistance against one of those letters from Procurement and Assignment hinting in pointed terms that the doctor under forty is eligible for a commission in the medical corps and will he kindly present himself, with no great delay, for physical examination. Time and again an industry which fancied it was doing essential war work has found that its doctors were not considered essential, while the doctor who had a reserve commission before entering the employment of a war industry is rarely even deferrable.

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* Read at the Fifteenth Annual Scientific Assembly of the Society, October 2, 1943.

However, I have yet to find a plant manager or an executive who will interfere in any way with a young doctor's desire to join the armed forces; the yard properly may ask for a few months' deferment pending the hunt for an older substitute, but that is all.

In the shipyards we are attempting to keep 2 full-time doctors for the first 5,000 employees and 1 doctor for each 5,000 thereafter. Surely that is not an exorbitant demand. We have had no special trouble getting nurses, because they like the jobs, the hours are fixed, and the pay naturally has to compare favorably with shipyard wages.

In general, our doctors' salaries reflect those of the district with a reasonable reduction for the fact that the doctor has no office expenses. We have many surgical cases which are referred in from the yard dispensary to the hospitals of the neighborhood. In those cases we pay the prevailing fee schedules of the region. I can say without fear of contradiction that all the war industries have made heavy demands upon the surgeons of the country and upon their hospitals. They have responded splendidly.

We have had a few instances in which we certainly were victimized. One prominent surgeon was getting $3,500 a month for the medical directorship of a large shipyard. In another instance, 2 young doctors, fresh from their internship, demanded an increase from $400 a month for part-time work because they discovered some of our most skilled welders made more than they did. They were increased to $600 and earned it. Two months later they asked for $200 more which was refused. The other day a doctor of 27 demanded $750 a month with the polite intimation that he also expected us to demand his deferment. We wished him Godspeed.

But these abuses do not reflect the practice of your profession as we are finding it in the war industries. For every such abuse—and the total is very low—we have instances of genuine self-sacrifice in which the doctor has come generously to our aid. We have many older doctors on our payrolls—men who are taking time they can ill afford to come and help us out, some part-time, some full-time. In one yard we had a doctor over 80 who stated frankly that he was too old to help us unless he could arrange his affairs and his time to conserve his strength. He moved into the dispensary and lives there supervising our first-aid work and handling many of the cases himself. He would not attempt surgical operations, but he certainly has helped us out. Several older doctors have volunteered to come in and do our preplacement physical examinations, something we need badly in all our yards.

In shipyards we get about 1.2 visits to the yard dispensary per man per month. In plants with which I have been associated in peacetime the dispensary calls were about the same, but sometimes they dropped down to 0.6 visit per man per month. We have yet to get down anywhere near that figure in shipyards. One of our greatest troubles is to care for the non-industrial cases such as severe colds or injuries sustained at home. In many of our war industries the men must rely solely on the plant doctor for all medical help. In two localities the Maritime Commission contractor has built large hospitals which take care of the workers and their families through a medical insurance scheme. The benefit to the yards from a well-run plan of this sort is great, and in isolated communities some such scheme is imperative.

I wonder if the medical profession appreciates the problems imposed by our great housing projects and our huge labor migrations. A housing project used to mean a smallish venture, a village of a few hundred or perhaps a thousand. One of our Maritime developments at Vanport, Oregon houses the shipyard workers of Portland and of Vancouver, Washington. The population of Vanport now exceeds 40,000, making it the second largest city in the state. It has its own post office, fire and police departments, hospital, water department, and all the things we expect in cities. Two years ago it was low land along the river bank without a house on it. We can show you similar developments near other yards as at Richmond on San Francisco Bay and to a lesser extent along the Gulf.

The only other places in which you can find comparable developments are in Army and Navy cantonments. But there you deal with a disciplined group of young men. They are a lot easier to rule than are families who may have moved halfway across the continent, have never submitted to discipline or regimentation, and have not the slightest intention of beginning now. A young man, wife and 2 children move from up-country to a Gulf coast yard. They rent quarters in a dirty tent colony for $2 a week. A little nearer the yard FHA has built a village of attractive houses renting for as little as $6 a week. But the up-country man and family don't mind the dirt or using the tent colony's out-house, and they do mind the $6 in spite of high wages. So they elect to stay, and we fail to induce the man to accept what we naïvely imagine are benefits. He likes his dirt and lack of conveniences. The colony passes the local sanitary inspections, which are fair enough, and we sit by with our fingers crossed and hope there will be no epidemics.

Our housing developments and our labor migrations would have been the worst kind of failures without the splendid help we have had from the U. S. Public Health Service and the various state units. Where the Army, Navy or Maritime Commission has asked for help the Service has given generously of its personnel and their time and has looked after our major public health needs.

In the shipyards we admit we have many unsolved problems. We think we are overcoming them slowly but surely. Eye accidents lead the list of causes for dispensary calls—foreign bodies and conjunctivitis from arc flash in electric welding. We have far too many crushed toes and crushed fingers. Gradually we are getting men and women to wear safety shoes, shoes with steel caps, but we can show you plenty of workers in our yards that are not wearing safety shoes and should be. We get too many head injuries which could be prevented by wearing hard hats, and our use of safety goggles is by no means as widespread as we wish.

We ask your help in preventing accidents. We need it. The practical surgeon usually is not greatly interested in preventive work yet is generally intrigued by things mechanical, and he is an alert observer. If we have an experienced surgeon as our medical director, he is not apt to take kindly to a suggestion that he inspect the yard or plant periodically and see what his patients do to get themselves into the messes he is asked to repair. We don't expect our shipyard doctors to improve on Kaiser's prefabrication scheme or to design a new gear for General Electric Company's turbines. We want him to go out and see how his patients get hurt. Then and then only will he be able to talk convincingly to his patients. And then we will get case reports which show that the doctor's anatomic knowledge of ships has at last become professional.

The accident rates in our new war plants and in our new shipyards are falling slowly but with gratifying regularity. Much of this drop is due solely to the fact that the workers are becoming seasoned, and seasoned men have fewer accidents than green men. Experience engenders care as well as skill. In one of our largest west coast shipyards we paid $5.00 per $100 of payroll for our compensation insurance when the yard started up. In the second year of operation the basic rate was reduced to $1.86 and then to $0.93. For comparison, you might be interested to know that logging operations in this western state pay $10.00, bridge building companies pay

$17.00, and model airplane manufacturers pay $1.65. In short, our shipbuilding industry, a new one to the district, compares very favorably with industry at large.

Occupational disease in shipyards is not a serious problem, but it is serious in some munition plants. In general, occupational disease is controlled by keeping the working environment up to a standard which varies with the materials handled. In some plants the offending agent may be a volatile solvent which causes an anemia or an explosive which causes a serious dermatitis. In shipyards we have some trouble in keeping the air clear in welding; about 9 per cent of our shipyard employees are welders, and if the air is not reasonably clean the fumes from welding are troublesome. The fumes may cause a bothersome bronchitis which is relieved promptly by working in clean air.

We have had very little lead poisoning, although we commonly spray red lead priming coats on all outside metal work. We have had some poisoning among welders who worked on lead-painted steel, but again the total number of cases is not serious.

Old industries always have a seasoned worker who keeps the young men from getting needlessly alarmed over trivial things. We had a near-strike in some of our west coast shipyards because the women welders heard that the welding arcs gave off sterilizing X-rays. When we pointed out to them that X-ray machines operate at something over 60,000 volts and our welding machines ran at some 60 volts, it helped to show them the rumor was totally false. The old employees helped us "scotch" this rumor, and the medical profession backed us up forcefully.

In some of our yards physical examinations are not given because labor fears the abuse of such examinations. There have been instances in the past when men felt that they were barred from all employment because of some physical defect. Today we have a serious labor shortage and we can employ men with one eye, one leg, or one arm. We are not afraid to try any man who will coöperate by letting our doctors indicate where a man with a serious physical defect can work safely. But we do not want men taking jobs they are not fitted to do or jobs in which they will menace their fellow workers.

We are bound to get increasing numbers of men rejected by the Army or Navy, and we are sure to get soldiers and sailors discharged for disability. Industry has no fear of such rejectees; we have places for them, but we must know their physical conditions when they enter industry so that we can place them in the jobs for which they are suited. In one large shipyard we have a very good safety inspector who lost both arms in a railroad accident before coming with us. We are not ashamed of him; we are proud of him and glad that we have a job for him.

Again we need your help; take the time and the trouble to tell workers that they should demand physical examinations to safeguard their own health and that of their families. Make them appreciate the fact that you practice this doctrine on yourselves and your families and let us dispel once and for all the suspicion some labor leaders still have that the preplacement physical examination is the root of all evil.

Warns that influenzal meningitis is potentially contagious. A warning that influenzal meningitis is a potentially contagious disease despite general beliefs to the contrary is contained in a report in *The Journal of the American Medical Association* for February 19, 1944, by A. J. HERTZOG, M.D.; ISABELL LOGAN CAMERON, M.D., AND A. E. KARLSTROM, M.D., Minneapolis.

The three physicians report the cases of two brothers fatally stricken with the disease. The older, aged 4 years, died within twenty-six hours after onset of the disease and the younger, aged 2 years, became ill two days later and died within fifteen hours.

"These cases," the authors say, "show that it is possible to have more than one child in a family contract influenzal meningitis and that the disease is potentially contagious. If other young children are present in a family where influenzal meningitis has occurred, prophylactic doses of sulfadiazine or passive immunization would seem indicated. . . . " They explain that according to a previous investigator the incubation period of the disease is less than five days.

"The method of spread of influenzal meningitis," the Minneapolis physicians explain, "is not well understood. The usual sporadic nature of the disease suggests carriers as a possible source of infection. In our cases, nose and throat cultures taken by the Minnesota Department of Health from parents and other contacts were negative for Haemophilus influenzae. The tendency to affect infants and young children almost exclusively suggests that the average adult is immune to the disease. . . . "

A STUDY OF BRONCHIECTASIS AT STATION HOSPITAL, FORT BELVOIR, VIRGINIA*

T. EWING THOMPSON, JR., M.D.
Major, Medical Corps, Army of the United States
FRANK C. CAWLEY, M.D.
Major, Medical Corps, Army of the United States
ALVIN SELTZER, M.D.
Captain, Medical Corps, Army of the United States

THE following study of a series of patients with bronchiectasis was prompted by the high percentage of such cases which was discovered routinely in the chronic respiratory service at this Hospital. This group of cases is of particular interest when it is realized that they were all found in men between the ages of 19 and 44 years who had been examined and passed by induction boards for Selective Service, and presumably had been passed radiographically as well as physically. In all fairness to the induction boards it must be said that such an examination of necessity does not allow for lipiodol studies in suspicious cases, and that physical findings in this disease may vary from day to day. However, emphasis is laid on the fact that these cases were discovered routinely and not as a result of a special search for such cases. They were discovered by history, roentgenographic study, including lipiodol injections, in men previously considered to be physically fit for military service. All but a few of these men were discovered in the first few weeks of their training.

It may be said that the disease was found on a secondary screening of selectees. For it is one of the important functions of a Station Hospital at a Reception Center or a Replacement Center such as we have here to accomplish any detailed studies on men who do not seem to measure up to the physical requirements of a soldier. Many men who lead lives of relative ease and physical inactivity in civilian life can pass an induction examination, but when these same men are thrown into strenuous physical training, defects come to light which were heretofore unsuspected. It is believed that this latter circumstance played a large part in the discovery of these cases.

Bronchiectasis may be defined as a chronic, progressive disease of the bronchi or bronchioles in which the bronchial tubes are dilated beyond their normal size with an accompanying inflammatory reaction in their walls. Until 1922, when Sicard and Forestier discovered the usefulness of iodized oil in outlining the bronchial tree, most of these cases were called chronic bronchitis.[1]

Thirty-three consecutive cases were found in the routine admission to this Hospital from November 1, 1941, to November 1, 1942. The clinical records of these 33 cases have been reviewed, and the collective findings will be presented.

Investigation of these cases in relation to etiology revealed that 20, or 61 per cent, of the group developed their symptoms following a respiratory infection. The following table shows the etiology as indicated from the onset of symptoms:

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* From the Medical Service, Station Hospital, Fort Belvoir, Virginia. This material was prepared through the coöperation of Colonel Thomas J. Leary, Commanding Officer, and Lt. Colonel Stuart O. Foster, Chief of the Medical Service.

Prior Disease		*Per cent*	
Pneumonia	12	36.6	61.0
Bronchitis	5	15.1	
Influenza	1	3.3	
Disease of childhood—pertussis or measles	2	6.0	
Insidious	13	39.0	

Watson and Kibler[2] believe that the disease has an allergic basis, because 90 per cent of their cases showed manifestations of clinical allergy. None of our case records showed a history of allergic manifestations. Too much significance should not be attached to this statement because it was only in the more recent cases that a determined effort was made to determine this point by extremely careful questioning.

A study of the race incidence showed that 31 of the men were white and 2 were colored. This represents a ratio of 16 to 1, and while for security reasons the Post population ratio cannot be published, the colored census is nearer to the white census than is represented by the above ratio. Therefore, in this study, the incidence of bronchiectasis is greater in the white race.

The bronchiectasis cases constituted 0.25 per cent of all admissions to the Hospital for the year. This means 1 out of every 400 cases admitted was bronchiectasis, or that a new case was discovered on an average of about every 11 days.

It was noted that 27 of the men, or 81 per cent, of the cases were smokers. A survey of 317 other hospital cases showed that 81 per cent of these men were also smokers. It would appear that tobacco smoking has nothing to do with the etiology.

An investigation of the relationship between bronchiectasis and sinusitis reveals that 11 patients, or 33.3 per cent, had an associated sinusitis which showed clinical signs and symptoms. Ten, or 30.3 per cent, of the patients showed no clinical evidence of sinusitis. In 11, or 33.3 per cent, of the cases, no record was made for or against evidence of sinus infection.

The average age of the patients was 29.5 years. The youngest patient was aged 19 years and the oldest, 44 years. These are the extreme ages in the Selective Service group. The men fall into the second to fifth decades as follows:

Age	*No.*	*Per cent*
18–20	1	3.3
20–30	16	48.4
30–40	13	39.3
40–45	3	9.0

The duration of symptoms before hospitalization in this group was found to be approximately 11 years. The case showing the shortest duration was 2 months, while that showing the longest duration was 40 years. The following table groups the cases in relation to duration of symptoms.

Years	*No.*	*Per cent*	
Less than 1	3	9.0	
1–5	8	24.2	
6–10	3	9.0	57 per cent over 5 years
11–20	13	39.3	
Over 20	3	9.0	
Not determined	3	9.0	

The average duration of symptoms was 18.8 years.

From the medico-military standpoint the length of the soldier's service before his admission to the Hospital was of considerable interest. The average length of service previous to admission was 5 months. The least period of service was 10 days and the greatest period of service was 4½ years.

Army Service	*No.*	*Per cent*
Less than 1 month	4	12.1
1–2 months	10	30.3
2–4 months	10	30.3
4–6 months	2	6.0
6 mos. to 1 year	4	12.1
Over 1 year	3	9.0—1 onset previous to enlistment. 2 onsets since enlistment.

Thus it is seen that 79 per cent of cases were discovered within 6 months of induction, and it was not felt that the short period of army service had caused any progression of the disease in the majority of the cases.

The symptoms early in the course of the disease are not distinctive and usually are thought to be due to some other condition. Cough is the most common early symptom.[3] It is usually intermittent at first with alternating periods of exacerbation and quiescence. After a variable period of time it becomes chronic. Expectoration, the next symptom, is variable in amount, but usually in excess of 2 ounces each day. Formerly it was thought that it was always copious in amount, but now it is realized that the amount may be small in some of the cases. These have been designated as the dry type. Arbitrarily, cases with less than 1 ounce of sputum daily were called dry, and those bringing up more than 1 ounce wet. Thus, on this basis, 26 cases, or 81.8 per cent, were of the wet type, and 7 cases, or 21.2 per cent, were of the dry type.

The sputum characteristically is "chunky," possibly due to the drying in the bronchiectatic cavities before being coughed up. Changes in posture may cause the sputum to come up in greater amounts. Other later symptoms are dyspnea, hemoptysis, lassitude, weight loss, pain in the chest, and night sweats. Our cases showed the following:

Symptom	*No.*	*Per cent*
Cough	33	100.00
Expectoration	33	100.00
Temperature 99° F. or above	26	78.7
Dyspnea	17	51.5
Pain in chest	16	48.4
Lassitude	10	30.3
Weight loss	9	27.7
Night sweats	8	24.2
Hemoptysis	7	21.2

The above findings are quite similar to those of Farrell.[3]

The signs elicited in these patients were as follows:

Sign	*No.*	*Per cent*
Râles	30	90.9
Suppression	12	36.6
Dullness	8	24.2
Clubbing	3	9.0

X-ray studies, both flat plates and bronchograms, were done in all cases. A positive bronchogram was used as the criterion for diagnosis.

Bronchoscopy was performed in only 6 special cases. Since most of these cases existed prior to induction, and since they could not be cured except by methods involving a disproportionate risk to the Army, they were separated from the Service on a Certificate of Disability Discharge.

A small number of very minimal cases were placed on limited service. All of the discharged soldiers were advised to place themselves under the care of a physician especially trained in diseases of the chest upon their return to civil life. In this way the call to military service acquainted them with the nature of their respiratory disease and gave them the best opportunity to seek competent treatment in their home communities.

The facilities provided by the Army for the diagnosis of these cases have been excellent. This point must not be lost sight of in this study; it is borne out by the fact that 15 patients, or 45.4 per cent, of these cases have sought medical relief for their condition in civilian life. In none of these patients were lipiodol studies made prior to their hospitalization in the Station Hospital.

It is not within the scope of this paper to discuss treatment, since diagnosis was the main problem from the medico-military standpoint. Postural drainage was used routinely. Bronchoscopic drainage was used in the 6 cases bronchoscoped.

Of the 33 cases of bronchiectasis presented in this series, from a radiographic point of view, 14 (42 per cent) were considered severe, 9 (28 per cent) moderately severe, and 10 (30 per cent) minimal in extent. The percentage of bilateral involvement was not determined, since from a military point of view, demonstration of the disease on either side is sufficient for discharge from the army. Sixty-four per cent were cylindrical, and 36 per cent were of the saccular variety. The cases were studied rather intensively prior to bronchography and only cases that presented persistent X-ray findings of bronchiectasis on the routine postero-anterior, lateral and oblique views of the chest were subjected to lipiodol instillation. These findings consisted of varying degrees of peribronchial intensification of lung markings into the bases, frequently having a mottled appearance, which failed to improve following routine medical care.

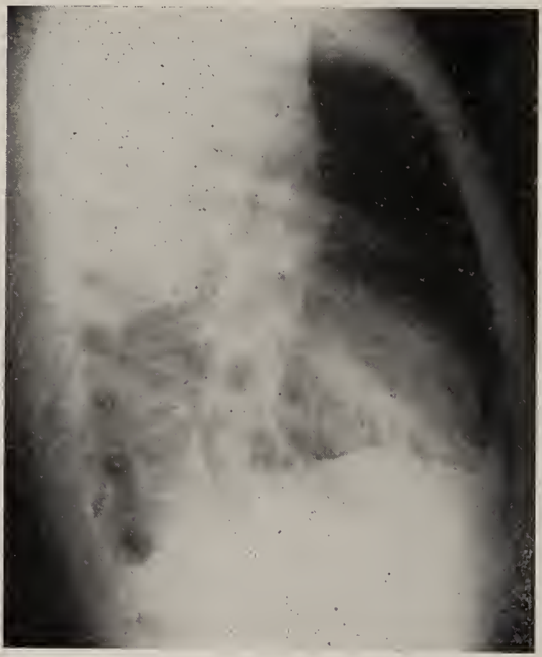

FIG. 1. Posterior elevation of the right diaphragm, not noted in the routine postero-anterior view, indicating atelectasis in this region.

Two indirect signs were persistently noted in the more severe cases which were so consistent that they should be given special mention. One of these was a posterior elevation of the diaphragm on the affected side, noted only on the oblique and especially the lateral views, and at no time being evident on the postero-anterior projection (figs. 1 and 2). This indicated a localized atelectasis in this portion of the chest, and with clinical findings suggesting bronchiectasis it was logical to assume that the atelectasis was on a bronchiectatic basis with a collection of mucous secretion and inspissated pus in a rather large bronchus resulting in occlusion and subsequent collapse of the corresponding parenchyma supplied by that bronchus. The second indirect sign noted in many cases was a zone of increased radiolucency in the base of the affected lung, adjacent to the collapsed portion (fig. 3). This represents a localized emphysema, compensatory in nature, the lobe above expanding to occupy the space previously occupied by the collapsed portion.

All cases in this series presenting either of these indirect signs were proven to be bronchiectasis by subsequent bronchograms.

The importance of more frequent oblique and lateral views in addition to the routine postero-anterior X-ray film of the chest in chronic respiratory disease, especially those cases that clinically suggest bronchiectasis, cannot be overestimated.

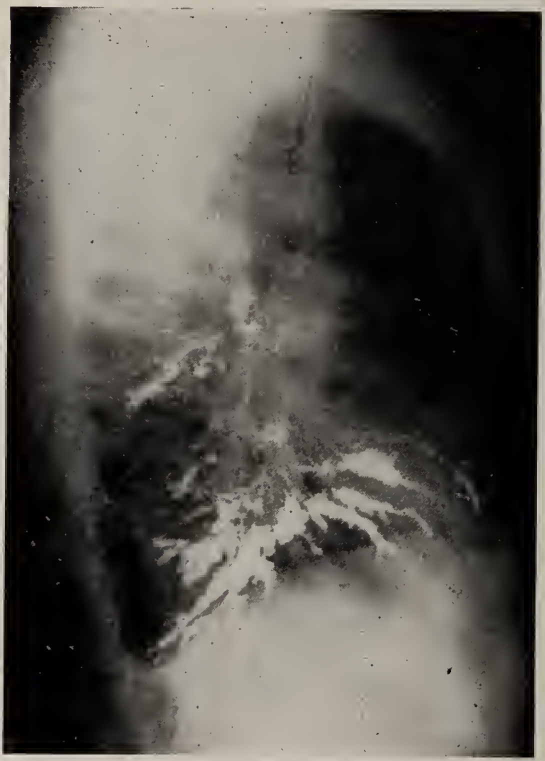

FIG. 2. Lateral bronchogram of patient of fig. 1, showing extensive bronchiectasis in the atelectatic area.

SUMMARY

1. Thirty-three cases of bronchiectasis confirmed by bronchography have been found in a

1-year period at the Station Hospital, Fort Belvoir, Virginia.

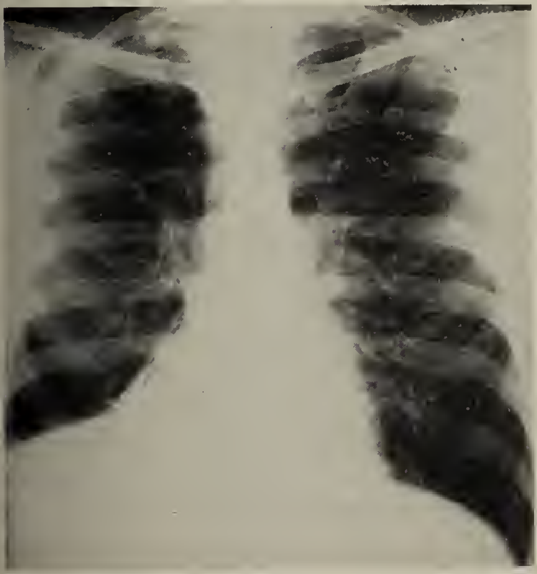

FIG. 3. Emphysema (compensatory) adjacent to atelectatic right lower lobe, which has collapsed posteriorly producing the characteristic triangular shadow along the right cardiac border.

2. In 61 per cent of the cases symptoms followed a respiratory infection.
3. There was a greater incidence of the disease in the white race than in the colored race.
4. Smoking did not appear to play a part in the etiology.
5. The disease is chronic in nature; 57 per cent of the cases had shown symptoms for a period longer than 5 years, the average duration being 11 years before hospitalization.
6. The cases were discovered early in the military service of the soldiers, 79 per cent being found within 6 months of service.
7. Oblique and lateral roentgenograms are indispensable in making the diagnosis in many cases before the bronchogram is done.

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Another clinical study reveals cold vaccines of no value. A study of cold vaccines and the incidence of the common cold among men and women employed by an industry in five geographic locations leads LEMUEL C. MCGEE, M.D., Wilmington, Del.; J. E. ANDES, M.D., Morgantown, W. Va.; C. A. PLUME, M.D., Succasunna, N. J., AND S. H. HINTON, M.D., Parlin, N. J., to report in *The Journal of the American Medical Association* for February 26, 1944, that "No clearly evident protection against the cold and related acute respiratory infections can be demonstrated in the results of this clinical trial at mass immunization. The indiscriminate use of cold vaccine now available is not the answer to the problem of industrial absenteeism due to acute respiratory infections."

Three vaccines administered by mouth and two by injection either into a vein or beneath the skin, which are currently offered as prophylaxis against the common cold, were given clinical trials in a group of industrial and office workers during the October to April season of 1941–42 and 1942–43. At the same time some employees in the groups were given, either by mouth or injections innocuous substances which they thought were cold vaccines. In many instances some of the latter employees received vaccine treatment one season. Another control group took no kind of treatment but reported cold during the periods of the study.

By assigning possible significance to slight differences of the arithmetical averages of the various groups, it was noted that the fewest colds developed among those receiving either a certain vaccine by injection or a placebo tablet by mouth. Groups receiving placebo treatment, either by mouth or injection, or no treatment at all lost fewest days from work because of cold. Groups receiving placebo injections or nothing at all had the mildest infections, measured by the length of absence per acute cold reported.

The authors point out that their findings confirm those reported from the University of Minnesota in 1938 and 1940 and of a similar study among military personnel.

MORBID FEARS

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FEAR is a universal human reaction biologically justified by the protection it provides for the individual in the event of danger. It is an emotion experienced when an individual is confronted with a definite threat to life and limb. With the experiencing of fear, there is set in motion a large number of visceral phenomena, the sole purpose of which is to help the person escape or combat danger. Not all persons respond in the same way to fear-producing situations. Some people, ordinarily unafraid of dogs, are frightened by their barking, while other individuals remain undisturbed. Then there are those who do not mind thunder and lightning, taking these phenomena as a matter of course; others are very much frightened by lightning and thunder.

While fear is thus experienced in the presence of a definite danger, and we might say the degree of fear experienced is exactly proportional to the degree of danger present, instances are observed when the objective cause of fear appears negligible, yet the fear reaction may be so marked as to virtually precipitate a panic. Such a fear, which is wholly out of proportion to the stimulus, partakes thus of the nature of a neurotic reaction, and we speak of these as "phobias." Hence, one individual may be frightened "to death" on seeing a black cat; another one may be precipitated into a frenzy on seeing birds, etc.

There is a relation between fear and superstition. A superstition may be spoken of as a crystallized fear. Thus some individuals regard it as a fearful omen if they are crossed by a black cat, while others think that Friday the thirteenth is a day laden with a dark future.

Types of Phobia

Simple phobia is a conditioned reaction due to some early "unpleasant" experience such as having been frightened by a dog, a snake, or a mouse. The patient relives the fear-producing episode of his childhood. For instance, a patient told me how, at the age of 12, she discovered a small dead mouse under her pillow. She was frightened and screamed. Her brother had placed it there as a prank. Ever since this particular episode she feels compelled to look under her pillow each night before retiring. She claims she has a greater phobia for a mouse than an unfriendly dog.

Complex phobia is one associated with a conflict that has been "repressed" or buried in the unconscious. The patient protects himself or herself from the "real" fear by taking on a "substitute" fear. For example, an unmarried girl who has a morbid fear of dirt (misophobia) and finds it necessary to wash her hands more than the usual number of times may actually be suffering from a "fear of moral contamination." The latter constitutes the unconscious or "true" fear.

Variety of Morbid Fears

There exist as many phobias as there are fears. Each has a specific name. The Greek prefix in many cases gives one a clue as to the nature of the fear. For example, syphilophobia, as one would surmise, means a morbid fear of syphilis; microphobia, a fear of microbes; cardiophobia, a fear of heart diseases, etc. Rather than burden one with a lengthy list of technical names for various phobias, it would be more practical to present their translated meanings, the variety of things that become the object of a phobia: cats; thunder; being alone; cancer; being buried alive; pain; crowds; dogs that bark; fire; God; heart disease; negligence of duty; poisoning; snakes; 13 at a table; strangers; surgical operations; sexual intercourse; physical assault; losing one's face (feeling humiliated); not being able to "take it"; dentists; the boss; insects; reptiles; plants; losing one's job; doing something considered asocial; masturbation; women; men; ideas; sin; not getting married (fear of becoming an "old maid"); noise; lightning; crossing bridges; funerals; a corpse; tuberculosis; dirt; heights; pointed objects, etc.

CITATION OF CASES

The following are excerpts from case history material which tend to illustrate the etiologic mechanisms of various kinds of phobias. Space does not permit me to present the complete data on each case. Although it appears that the patient suffered from a single isolated phobia, there were other less important fears involved.

Case 1.—*Cardiophobia* (*fear of heart disease*). A woman, aged 27, suffered from insomnia, weakness, nervousness and anorexia. She insisted that she had heart disease and would die of a fatal heart attack. Physical examination and electrocardiograms were negative. She expressed a fear that God would bring about her death. I learned that for 6 months she had nursed a secret love for her neighbor's husband. The neighbor, a woman in her late thirties, was ill with cancer. The patient had hoped she would die. Cancer finally did cause the woman's death, and shortly afterwards the patient succeeded in marrying the widower. Several months following the marriage, however, she began to experience acute states of anxiety and expressed a fear that she would die suddenly. She became obsessed with the feeling (omnipotence of thought) that she was the cause of her neighbor's death.

The phobia involving her heart served as an outlet for her guilt (a self-punitive mechanism). She was made to understand the psychopathology of her phobia and responded well to psychotherapy with the result that her anxiety symptoms disappeared.

Case 2.—*Eremophobia* (*fear of being alone*); *Anthrophobia* (*fear of men*). A married woman with 1 child had been masturbated by her father when she was 10 years old. Since that time she has always felt ashamed and guilty. Her phantasies were of an incestuous nature. She masturbated to excess prior to marriage. There were no premarital heterosexual experiences. Following marriage she influenced her husband to spank her on the bare buttocks with the handle of a hairbrush. She claimed that only through flagellation of this kind was she able to experience a sexual orgasm. Her orgasm incapacity during coitus was probably the result of incestuous guilt.

The fear of men was traced to a fear of her father sexually, arising out of her traumatic experience at the age of 10. Emotional release plus insight brought the unconscious motivation of her phobia to the surface which improved her relationship to her husband and toward men (father-substitutes). The flagellation of course represented the need for punishment at the hands of her father toward whom she entertained sexual thoughts. She has given up her craving to be spanked and claims on several occasions she has experienced an orgasm during sexual intercourse with her husband. The fear of being alone was traced to a fear of resuming premarital masturbation.

Case 3.—*Acrophobia* (*fear of heights*). A married man with 1 daughter complained of dizziness, headaches, nausea and general malaise. His unmarried daughter had become pregnant and he found it necessary to escort her to a private institution where she gave birth to the child. The child was adopted by a strange couple and the entire affair was kept a secret. The father and daughter returned home. However, 6 months later the father learned quite accidentally that several members of his community knew about his daughter having been pregnant out of wedlock. It was shortly afterwards that he began to entertain a pronounced fear of heights. He was afraid to look out of a window because his office was located on the sixth floor. Although he denied suicidal thoughts or inclinations, it was later revealed that his acrophobia represented actually a fear of suicide disguised by a fear of heights (mechanism of displacement) to escape disgrace.

Case 4.—*Ophidiophobia* (*fear of snakes*). A woman aged 21 stated that she had a dread of snakes or anything that resembled a snake, like a rope lying on the ground or a garden hose, etc. She also complained of "nightmares," at which time she would scream in her sleep. She had resorted to barbiturates at bedtime with no avail. In the course of one of her treatment-interviews, she spoke of having slept at the age of 8 with her brother who was 16 at the time. She recalled how one night this brother put his arms around her and she was able to feel through his pajamas his penis pressing against her thigh. She felt very uneasy and sensed it was wrong. The next morning she told her mother that she no longer wished to sleep in the same bed with her brother. This experience was no doubt an etiologic factor as a "traumatic episode" in the patient's psychosexual development. It was not until she began to go out on dates that she became conscious of a fear of being sexually accosted. She spoke of her boy friends as being all alike, "wolves."

When she learned that her fear of snakes was but a screen for her fear of sex, she decided to relinquish her phobia. Her changed attitude toward the whole subject of sex eliminated the anxiety, which in turn reduced the frequency of her nightmares.

Case 5.—*Toxicophobia (fear of poisoning).* A man aged 23 recently came to Washington, D. C. to work after living on a farm out West practically all of his life. He complained of chronic pain in the epigastrium. Physical examination, laboratory tests and gastrointestinal X-ray examination were negative for any gastric pathology. A physician had told him he was apparently suffering from a psychoneurotic condition, a diagnosis which proved to be correct. In the process of mental catharsis during psychiatric treatment he confessed that he had been having sex relations with calves while on the farm. He had trained calves to imitate the act of fellatio after dipping his penis in milk. He also informed us that his mother wanted him to become a preacher, that she felt he had received the "call" to become a good minister. The patient then stated that he would rather commit suicide by taking poison than to ever allow his mother to discover about his sexual activities with animals. His suicidal desires were the result of his sense of excessive guilt which found its outlet in the form of a phobia. He felt the food he ate in restaurants would eventually poison him. There was no evidence to support either the diagnosis of a psychosis or a paranoid delusional state.

Unburdening the weight of his sex guilt afforded him considerable moral relief, which in turn relieved him of gastric distress. He no longer entertains his apprehension of food poisoning.

Etiology and Structure of Phobias

Morbid fears or phobias, like obsessions, are generally regarded as manifestations of "psychasthenia" (mind-weakness). Various compulsions, such as the washing of one's hands an unusual number of times or checking to see if doors are properly locked, etc., may also be considered sister-manifestations of the same phenomenon. Phobias are "substituted emotions." They are sometimes spoken of as "repression neuroses." The abnormal fear represents a symbol of something that is unpleasant and that has been repressed. In other words the phobia serves a definite function. It is intended to disguise or displace an entirely different fear, one which is too painful to our consciousness. A morbid fear is an escape mechanism from some inner psychic conflict. For example, a fear of thunder may symbolize a fear of recalling how a father would shout at the mother in profane terms, or how the father would manifest terrific outbursts of anger, etc. These fears or "emotional distortions" can be traced to early repressed or forgotten experiences. They cause chronic states of anxiety and prove quite distressing. The anxiety overruns into physical channels which in turn aggravate the phobia, and a vicious cycle is established.

Finding the cause of the phobia is to understand the symbolization of the morbid or irrational fear. One might ask, if a phobia is a protective mechanism for a fear that is more painful, why attempt to eliminate the phobia? Simply because phobias place the patient in a chronic state of anxiety. It is preferable to have the patient abreact or "re-live" emotionally the original fear, having him understand the unconscious motivation of his phobia and thus relieving him of his anxiety symptoms rather than to leave him at the neurotic pill-addiction level.

There exists no stereotyped symbolization chart of phobias. However, we have profited from past experience with patients suffering from similar fears, and like dreams we can keep in mind certain tentative diagnostic impressions which are either corroborated or rejected according to supporting evidence. For instance, we have learned that in many cases of agoraphobia or fear of open spaces there exists a disguised prostitution component. The woman who is afraid to walk in the street alone may be unconsciously afraid of giving herself sexually to the first man she meets. She may fear being regarded as a "street walker." A fear of snakes (ophidiophobia) may symbolize a fear of the phallus and may be traced to some early experience involving a man's penis. Syphilophobia may be a disguised fear of homosexuality. Misophobia, or a fear of dirt, may represent a fear of moral contamination. Zoophobia may stand for a fear of the father rather than a fear of animals. Aichmophobia (fear of pointed objects) may be a camouflaged fear in the male of homosexual seduction (phantasies of the act of sodomy). Each phobia, however, has its own etiologic nucleus, and therefore each case must be studied as an entirely new entity.

PSYCHOSOMATIC MANIFESTATIONS

During a fear-panic reaction patients experience a multiplicity of such somatic ailments as nausea, colitis, headaches, precordial pain, trembling, perspiration, weakness, nervousness, muscular spasms of facial or eye muscles, etc. They develop an overanxiety and become pessimistic about what may happen to them. Sometimes the symptom when translated yields the etiology of the neurosis. Vomiting not due to organic causes during early pregnancy may symbolize a defense mechanism, an unwillingness to bear a child for the man. In many of our phobias there is the element of "wishful thinking." We all appreciate, for example, the sexual implication in the story of the old maid who claims to be afraid of men and who looks under her bed each night to see if some strange man is hiding there.

PROGNOSIS AND TREATMENT

The prognosis of simple phobias is relatively good. Reassurance and reconditioning the patient to his fear may help. But in the more complicated phobias these measures fail. It requires something more than "surface-psychotherapy" to bring about a cure. The prognosis of complex-phobias depends upon many factors, the resistance of the patient to treatment, the intellectual capacity of the individual, the ability to establish a workable doctor-patient relationship (rapport), the ability of the patient to coöperate and apply his acquired insight to the understanding of his phobia. Successful treatment consists of intensive psychotherapy, exposing the unconscious motivation of the morbid fear by tracing it to some causative traumatic episode or episodes, which have either been forgotten or repressed. Phobias are psychic disorders, and psychic conditions should be treated by psychic methods. Psychoanalysis and psychotherapy offer the best specific therapy for phobias and all other related conditions.

SUMMARY AND CONCLUSIONS

Fear is an emotional reaction toward anything that constitutes a threat to our instinct of self-preservation. Phobias are fears that are illogical and absurd, hence regarded as abnormal.

There are two kinds of phobias, simple and complex. The former is generally due to some known cause, while the latter is associated with some forgotten or repressed experience, usually unpleasant. There are about 80 to 100 known phobias.

Phobias are escape mechanisms from inner conflicts.

It is quite uncommon to find a patient suffering from a single or isolated phobia. The individual is handicapped by a host of related fears.

Morbid fears are capable of provoking many psychosomatic manifestations, such as anxiety, nausea, colitis, diarrhea, perspiration, tremors, pallor, vomiting, weakness, dysphagia, dyspnea, palpitation, tachycardia, frequency of urination, nightmares, etc.

It is well for the general practitioner of medicine, in taking an anamnesis of his patient's symptoms, to keep in mind the possibility of an anxiety-hysteria. The multiplicity of physical complaints may be the expression of the patient's phobia.

Treatment consists of intensive psychotherapy utilizing psychoanalytic methods.

The prognosis depends upon the resistance of the patient to treatment as well as the ability of the psychiatrist to expose the unconscious mechanism or motivation of the phobia.

If allowed to go untreated, phobias develop into malignant chronic states of anxiety.

Columbia Medical Building

RESULTS OF TREATMENT OF THE ACUTE ALCOHOLIC PSYCHOSES BY HYPERTONIC SALINE

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THE exciting cause of the mental disorders designated as delirium tremens and acute alcoholic hallucinosis has not hitherto been definitely established. It cannot be directly related to the alcohol content of the blood, since frequently enough the onset is precipitated by sudden withdrawal of alcohol and appears about 48 or 72 hours afterwards, when the alcohol content of the blood has fallen to practically nothing.[1, 2] The idea generally held is that it is some form of toxic psychosis, the specific toxin being unnamed, but recently the idea has grown up, under what might be called a vitamin complex in certain medical thinking, but with rather inadequate clinical support, that it is due to vitamin deficiency, particularly of the B-complex. There are, of course, observations supporting the use of the vitamins for the chronic cases, and for the avitaminosis attendant upon chronic alcoholism.[3, 4] There are many factors to obscure the picture. To evaluate clinical results, and to bring them into line with regular conditions of scientific experimentation, it is important to exclude as many factors as possible, while working on one problem. When the question is directly approached, as to how far the cerebral edema[5, 6, 7] is the cause of the acute alcoholic hallucinosis, and to what extent reduction of the cerebral edema[8, 9, 10] will cure the mental disorder, it is wise to exclude cases in which there is other complicating disease. When this is done the results are very striking, showing that uncomplicated cases coming under the treatment are almost invariably cured. When it is proved further that the total percentage of deaths, including the cases with complicating disease, is considerably less than obtains by other methods of treatment, the question must be asked whether it is the delirium tremens or the other disease which should be considered the principal cause of death. The answer appears to be that it is the other disease.

The work here reported is a continuation of that reported in this journal[11] which stated the theory, technic and results of treatment of several hundreds of cases of acute alcoholic psychosis with 5 per cent, i.e., hypertonic sodium chloride solution given intravenously. The hypertonic saline in the blood stream attracts fluid from the cerebrospinal system by osmosis, the choroid plexus, the perineural sheaths, and the perivascular tissues[8] acting as the semipermeable membranes of the classical experiments on osmosis. This work was done in the Gallinger Municipal Hospital, and was reported for the 17 months ending June 30, 1940.

Results are here presented for the 3 years ending June 30, 1943. Since the final diagnosis is more accurate than the admission diagnosis, the cases are those discharged in the period, not the admissions.

The emotional reactions of these acute, disturbed alcoholic cases soon come under control, usually after the first intravenous infusion of 150 or 200 c.c. of the 5 per cent saline. It is seldom that an arm-board has to be used after the first time. The reactions: the excitement; anger; irritability; hyperactivity; loud, noisy, demanding behavior; aggressiveness and belligerency; fear, which sometimes passes into panic; yelling and screaming; unruly singing, etc., are therefore scarcely seen in the alcoholic cases under this treatment. The disorientation and confusion, and the hallucinations clear up soon afterwards. The alcoholic cases at Gallinger Hospital are unusually quiet, and soon conform to ward discipline.

Because of the rapid cure of the condition the proportion of these patients committed as legally insane is quite low in this jurisdiction, the alcoholic psychoses sent away for permanent or semi-permanent hospitalization being almost entirely the chronic alcoholic psychoses.

In spite of the somatic dehydration evident in some of these cases, only a small minority of them require other parenteral fluids than the intravenous 5 per cent saline. The most immediate reaction is for the patient to take water or ask for it. It is not restricted at all, and being taken orally, i.e., in a physiologic manner, is apparently distributed in a physiologic manner. There appears to be no reason, from results, to fear a resurgence of fluid into the cerebrospinal system and a new exhibition of mental symptoms. This may occur if the hypertonic saline treatment is stopped too soon, when a recrudescence of symptons will sometimes occur, just as a new patient may develop the disorder in the hospital if the treatment is withheld because hallucinations have not actually developed. A case, for example, with apprehension but as yet no hallucinations, will probably not develop further if the treatment is used in a prophylactic way. It is wise to continue for a day or two after the hallucinations have ceased. The nocturnal hallucinations especially should be inquired into.

The end-results are most clearly indicated by the death rate. During the 3 years, July 1, 1940 to June 30, 1943, inclusive, the following cases were treated.

		DEATHS IN UNCOMPLICATED CASES	DEATHS IN COMPLICATED CASES	TOTAL DEATHS
Alcoholic psychoses	1858	8		
among			83	91
Total alcoholic cases	4248			

For the year 1937, which is taken as a previous average year, when other treatments were pursued, the figures are as follows:

		DEATHS IN UNCOMPLICATED CASES	DEATHS IN COMPLICATED CASES	TOTAL DEATHS
Alcoholic psychoses	274	16		
among			31	47
Total alcoholic cases	1289			

The proportion of the acute alcoholic psychoses to the total number of alcoholic cases has risen considerably since 1937, because after that time it became necessary to admit only the more severe cases to the hospital.

The percentage of deaths in uncomplicated cases of acute alcoholic psyshosis has therefore fallen from $\frac{16}{274}$, or 5.8 per cent, to $\frac{8}{1858}$, or 0.4 per cent. While if the total number of deaths among all alcoholic cases in the psychiatric department are counted against all the alcoholic cases, the percentage of deaths has fallen from $\frac{47}{1289}$, or 3.64 per cent, to $\frac{91}{4248}$, or 2.14 per cent, a fall of 41 per cent. This fall occurred in spite of the fact that very many of the milder cases are now excluded.

This work has evidently had some effect on the mortality rate from alcoholism in the District of Columbia, where it has fallen from 5.4 per 100,000 in 1937 to 2.6 in 1941,[12] a fall of 52 per cent, and 2.24 in 1942, a fall of 59 per cent.

From 1937 to 1941 the mortality rate for the whole of the United States fell from 2.6 per 100,000 to 1.8, a fall of 31 per cent.

In a municipal hospital many cases are admitted in poor condition, some of which have been neglected, and others after other treatment has evidently failed. Some cases live only a few hours after admission. Some discussion of individual cases will therefore clarify the matter still further. Of the 8 patients who died in the 3 years here reported, 5 died in the first 6 months. Some details of these cases follow.

Case 1.—This patient was admitted to the Isolation Building, where after 48 hours meningococcal meningitis and typhoid fever were excluded. The presumptive diagnosis then being delirium tremens, he was transferred to the psychiatric department, the temperature shortly thereafter being 106°F. Six hours later he died with a temperature of 109°F., the chest being full of moist bubbling râles. He had been ill for 6 months prior to admission. No autopsy was done, and the cause of death was given as delirium tremens.

Case 2.—This patient was kept on the 5 per cent saline for 2 weeks. He was drowsy. No autopsy was done, and so no other disease was established.

Case 3.—This patient apparently died from undertreatment. Only 2 intravenous infusions of the 5 per cent saline were given during the 40 hours he was in hospital. Right lower lobe pneumonia was suspected at the admission office, and fine râles were heard later. The cause of death was considered to be chronic alcoholism, delirium tremens, and pulmonary edema.

Case 4.—This alcoholic patient was admitted with a head injury that was apparently slight. Death occurred in 3 hours, while the physical examinations were incomplete. No 5 per cent saline was given. No autopsy was done.

Case 5.—This patient was sent in after unsuccessful treatment in another hospital. No 5 per cent saline was given. Death ensued in 2 hours. There was no autopsy.

The other 3 fatal cases occurred in 1941.

Case 6.—This patient lived only 3½ hours after admission. He was given 1 intravenous dose of 5 per cent saline. Soon afterwards he became cyanosed and comatose, and was given coramine, oxygen, and artificial respiration. No autopsy was done. If this was a cardiac case it would have been better to have given the hypertonic saline subcutaneously, as a 1½ or 2½ per cent solution, say 500 c.c.

Case 7.—This patient was treated prior to admission for neuritis and delirium, but was given 3 hypodermic injections of morphine in the attempt to quiet his delirium. On admission the temperature was 108°F., the pulse rate 180, the respiratory rate 42, and the blood pressure 70/50. He was cyanosed and very dehydrated. He died less than 4 hours after admission, with a temperature of 109°F. Autopsy showed some fattiness of the liver, and multiple hemorrhages. The cause of death was given as delirium tremens and tissue anoxemia.

Case 8.—This patient was admitted on a Saturday morning with clinical signs of delirium tremens. He was given only 2 intravenous infusions of the 5 per cent saline, the treatment not being pursued diligently over the weekend. He died early on the next Monday morning presumably from undertreatment. Autopsy showed some degree of fattiness of the liver, and congestion of the liver, lungs and spleen.

There were no fatal cases of uncomplicated acute alcoholic psychosis in 1942 or the first half of 1943. Following case no. 8 above noted, there were over 1,000 cases of acute alcoholic psychosis, without a death unless from complicating disease. The next death occurred in August 1943, when another treatment, by hypertonic glucose and vitamins, was tried.

The 83 patients who died in the 3 years ending June 30, 1943 from somatic disease, with the alcoholism as a contributing factor, may be broken down as follows.

PNEUMONIA	CIRRHOSIS OF LIVER OR FATTY DEGENERATION	ORGANIC HEART DISEASE WITH FAILURE	RENAL DISEASE	FRACTURE	OTHER
51	6	15	0	4	7

The case is listed under the principal cause of death, but 32 cases came under 2 headings, 18 others under 3 headings, and 4 other cases under 4 headings.

In discussing the pneumonia deaths, one might mention in the first place the 84,900 pneumonia deaths in the United States in 1941, even after the introduction of sulfones,[12] and also the fact that the people of the District of Columbia, for some reason or other, prefer to die in hospital. In the proportion of hospital deaths to total deaths, the District of Columbia, with 62.5 per cent, ranks higher than any of the states, the lowest being Alabama, with 23.5 per cent.

There has been a marked reversal of the mortality trend in the psychiatric department in these cases, which cannot be attributed to sulfones alone. It is felt that the 5 per cent saline in some cases is more help than the sulfones in turning the tide. Fortunately there is no incompatibility between the two treatments. Practically the only question that has arisen with the internists is that of hydration, of how early and how far to push isotonic fluids, and the route to be employed. It might here be remembered that sodium chloride has been recommended in pneumonia per se, to lessen the tympanites, lower the fever, and to stop the patient wasting water.[13, 14] A dehydrated patient cannot be hydrated by water and dextrose alone, since in extreme dehydration as much as one third of the total extracellular electrolyte may be lost,[15] and the sodium chloride should be looked upon as a hydrating factor. It therefore seems preferable to wait until further fluids are indicated clinically, and then to use the subcutaneous route.

The usual clinical, laboratory and X-ray means were employed as far as feasible in making the diagnosis of pneumonia. It was frequently confirmed by autopsies, and rarely made at autopsy. Usually it was made by two, three or four members of the house staff. In no case was it made by myself alone.

The small number of 6 cases listed with liver disease as the principal cause of death do not reflect the harmful effect of a diseased liver in these cases. It was frequently combined with other disease.

In a general way cardiac cases with decompensation should not be given the hypertonic solution intravenously. It should be given in 1½ or 2½ per cent strength subcutaneously, when very satisfactory results may be observed. The same procedure may be adopted in the occasional alcoholic case that is too violent on admission to accept the solution intravenously. The quietening effect in some of these cases is very striking. The mistake should not be made of trying to subdue these patients by sedatives alone, as dangerous amounts are then necessary. Morphine should not be given at all.

Kidney disease, when it occurred, was overshadowed by other disease.

The few fatal cases of fracture with delirium tremens should be noted, remembering how at one time the presence of any serious fracture would fatally prejudice the chances of a case. The 4 fatal cases here recorded all had serious and extensive skull fractures, 1 with spine and limb fractures as well.

One of the fatal pneumonia cases, transferred from another hospital after unsuccessful treatment, had bilateral fracture-dislocation of the humerus. The pneumonia was also bilateral, but probably his greatest handicap was that he had been given 2⅓ grains of morphine in the effort to quieten his delirium. The admission temperature was 106°F. Death ensued in 12 hours, with a temperature of 109°F.

As it might be thought that the beneficial results of the sodium chloride might depend on the replacement of the absolute deficiency, sodium chloride tablets were used orally in quite a number of cases. In fact, 2,500 grams of sodium chloride were used orally in the effort to obtain results. These, however, were by no means comparable to those obtained by the definite introduction into the blood stream of the salt in hypertonic form, and the oral use has been practically given up.

It appeared that a few cases of alcoholic pellagra which presented themselves provided an opportunity of testing the validity of the theory that the psychosis was dependent upon the lack of vitamins. The acute alcoholic psychosis in these cases cleared up rapidly, by the use of hypertonic saline, while the vitamins were withheld. Vitamins were used later, to rehabilitate the patient, and were used early in other cases with marked clinical avitaminosis.

Since cerebrospinal fluid is normally produced chiefly at the choroid plexus,[8] and it is withdrawn if in excess by the intravenous use of 5 per cent saline, when the choroid plexus, the nerve sheaths, and the perivascular tissues act as semipermeable membranes, so that osmosis occurs, it is not surprising that the treatment must be repeated from time to time and for a few days until the patient establishes proper controls and somehow manages to distribute his fluids equitably. It is usually given twice daily. The following case is interesting in this connection. An alcoholic patient was admitted after hematemesis, possibly from esophageal varix, and in shock. To avoid loading up the circulation he was given the hypertonic saline in $1\frac{1}{2}$ per cent solution subcutaneously. He improved rapidly, became mentally clear, and in due course of time, after several days, was referred to the medical department for cirrhosis and hepatitis, avitaminosis, and anemia. There he was given 5,000 c.c. of parenteral fluid in 36 hours, and he became wild and delirious. He was hastily returned to the psychiatric department late at night, where he died in the early hours of the next morning, before corrective treatment was instituted.

There have been several warnings against giving too much fluid, and causing water intoxication.[16, 17, 18] Rowntree[19] showed that cerebral edema was an outstanding feature in experimental animals in which water intoxication had been produced. One case that was seen and recognized in the medical department was promptly cured by stopping the excessive hydration and using hypertonic saline.

Spinal punctures have been omitted,[11] with no regrets. Spinal puncture is done, however, if meningitis is suspected or the question of hemorrhage must be settled. If the question is merely one of diagnosing central nervous system syphilis, it appears to be much better to delay it until the patient is over his alcoholic psychosis. Some of the fatal, complicated cases had spinal punctures done, with probably harmful effects. One patient died forthwith.

When spinal punctures were done more or less routinely in these cases, patients would still die with wet brains, demonstrable at the autopsy. When patients die now with complications, and the skull is opened, there is no great excess of fluid at all.

It is obvious that the withdrawal of excess spinal fluid will not remove the cause of the excess. Such a procedure is a crude attack upon the situation, which seems to make matters worse.[11] With osmotic forces contending against the urge to excessive secretion, one approaches much more nearly to correcting the disturbed physiologic mechanisms.

With the foundations of fact so far established some speculations might be permitted.

The unknown factors in the human physiologic economy are probably greater than the known, and medical practice must remain an art as well as a science. One must recognize clinical priorities. A process in which the critical period is a matter of hours has precedence over one in which the crucial phase is one probably of days.

The hypertonic saline treatment for the acute alcoholic is seldom contraindicated, but one is hesitant to use it in a case with marked renal insufficiency. However, in the following case the alcoholic factor seemed so pressing that the treatment was used, and the results were excellent. The patient was admitted in violent delirium, presumably alcoholic. But the blood urea nitrogen was 125 mg., and the creatinin proved to be 6.3 mg. He had cerebrospinal syphilis with optic atrophy. He quieted down in a very satisfactory manner, and a stricture being taken care of, the blood urea nitrogen fell in due course to 19 mg. He was discharged as not psychotic. One wonders if the delirium was not partly uremic, and if so whether cerebral edema, as a local edema resulting from renal inaction, was not a part of the phenomena in this case, and further if such a cerebral edema might not also be relieved when the hypertonic saline treatment is employed.

One occasionally sees a patient with organic heart disease, just recovering from decompensation, suddenly show psychotic symptoms. The internist is apt to assume that he was getting along quite well with the case, when unfortunately the patient "went crazy." But it is a possibility that cardiac compensation might apparently be established when some physiologic mechanism comes into play and thrusts fluid out of the circulatory system. Edema might thus occur in the brain, where the physical presence of excess fluid is not discovered. Such cardiac cases frequently recover from the acute psychosis when the patient is treated as a heart case for some time longer, and some cardiac reserve is established. But in 2 cases more direct means were tried. It was within the limits of safety to give 100 c.c. or 150 c.c. of 5 per cent saline intravenously. This was done with the idea of drawing excess amounts of cerebrospinal fluid, if present, back into the blood stream. The patients quieted down very soon. The excitement did not return, possibly because the patients had been helped over a stile.

In the neglected cases of acute alcoholic hallucinosis, which come in with fever of from 102° to 106°F., the superiority of the 5 per cent saline over glucose solutions is readily seen. The 5 per cent saline will definitely prevent pyrexia and hyperpyrexia if given early enough in the case, and will almost invariably reduce the temperature if it is not beyond 105°F. In 1 case the temperature fell from 106°F. to normal after 1 infusion, but usually such a result takes a few days. If the admission temperature is over 105°F., the case is critical, and the wayward physiologic processes may prove to be irreversible, with the means at present employed.

The question arises as to why hypertonic saline is better than hypertonic glucose. Two answers are here suggested. The molecular weight of glucose is over 3 times that of sodium chloride, so that with an equal weight of each the number of molecules of the latter is over 3 times that of the former. Furthermore, the salt is partly dissociated into ions. These molecules and ions are in rapid motion. With so many more particles in motion the osmotic pressure is so much more; there are so many more particles hitting on the semi-permeable membranes. Second, glucose is a food and is metabolized very differently from sodium chloride, which is an electrolyte and which is normally responsible to some degree for the distribution of body fluids.

Some additional remarks may here be made about the technic. The procedure has been much simplified by the use of regular dispensing bottles instead of cylinders. The bottles hold about 1,000 c.c. each. The skin is prepared with alcohol and iodine, and a rubber fingerstall, similarly sterilized, on the operator's left index finger, is a definite help at times, as it may be used to palpate a vein that cannot be seen. Various manipulations will dilate the vein and make it tense. To exclude the possibility of the hypertonic saline leaking into the tissues at the outset, the skin and venous punctures are made with the bottle below the bed level, finger pressure on the rubber tubing being released as soon as the skin is punctured. When the vein is punctured the bottle is raised at once, the tourniquet is released, and an adhesive strip attached to the bottle as a marker to indicate the desired amount, say 150 c.c. At the end the tubing is clamped. A fresh sterile dispensing cap with tubing, etc., attached is used for each patient. With several bottles in use, and a team of 4 people, it is feasible to do 10 patients in about 30 minutes. No. 18 needles appear to be satisfactory. Precautions are taken against embolism. If blood clots in the adaptor, the dispensing cap with attachments should be discarded.

Finally, a word might be said about the widely assumed futility of treatment and cure of these acute cases. They do not all revert to their alcoholism. Sometimes the memory of the severe illness, especially if associated with pneumonia, acts as a deterrent. In any case, until the social philosophy of physicians is enlightened and broadened to the extent that the causes of alcoholism are discerned, these cases should be regarded as no more culpable than venereal victims. The alcoholism seems to be a private escape from the prison of generally accepted codes and conventions, some of which codes and conventions might in time be outmoded by human effort.

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THE DIAGNOSIS AND DIFFERENTIAL DIAGNOSIS OF MENINGITIS

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WITHIN recent years there have been developed therapeutic agents against meningitis of all types that are far more powerful and effective than any previously used. In consequence, the mortality and case fatality rates from these diseases have been lowered remarkably. These better results have been obtained, however, not only from the greater "fire power" of the therapeutic agents, but also from the development and application of precision therapeutics. Thus, in order to utilize properly modern knowledge in the treatment of meningitis we must be in a position to employ freely the ubiquitous sulfonamides and in addition in many cases to employ type-specific antisera as well. Since the time element is still a prime factor, and the institution of proper treatment early in the course of the disease is most important, it behooves the modern physician to make an exact, etiologic diagnosis in a case of meningitis as soon as he sees the patient. In other words, when we acquired the aid of vastly improved therapeutic agents, we assumed the responsibility of making early and exact diagnoses to implement the use of these agents. Fortunately, this exact diagnosis can be made in a very large percentage of patients with meningitis within a very few hours after the patient is first seen. The purpose of the present paper is to review the method and procedure for making such diagnoses as they are being used now on the Infectious Disease Service of the Gallinger Municipal Hospital.

The first important point to consider in the diagnosis of meningitis is when to suspect its presence, and when to do a lumbar puncture. In the average case the history gives an important lead with the story of a severe headache followed by vomiting. Again the average patient presents a stiff neck, positive Kernig and Brudzinski signs and usually altered tendon reflexes, either exaggerated or diminished. In such cases there is no doubt of the advisability of a spinal tap. In other cases, however, particularly in the case of young infants, the evidence of meningitis is much more meager and must be sought diligently. Often an infant presents only a severe unexplained illness with no true evidences of meningeal irritation, or in older patients the meningeal signs may consist only of slight nuchal rigidity. In any such patient in whom the diagnosis of meningitis cannot be excluded, a lumbar puncture should be performed. Some physicians question the advisability of doing a lumbar puncture in the presence of a bacteremia. Pray[1] has demonstrated the innocuousness of this procedure and some authors[2] advise doing a spinal tap whenever there is demonstrated bacteremia caused by an organism that commonly invades the meninges.

There are three types of pathology that cause meningeal irritation and the physical findings of meningitis. They are (1) toxic irritation or meningism, (2) trauma or subarachnoid hemorrhage, and (3) infection or meningitis. In meningism the spinal fluid usually is under increased pressure but presents no abnormalities in cytology or chemistry. In subarachnoid hemorrhage, a bloody spinal fluid is almost always found. If the blood does not clear as the fluid continues to flow, we suspect that it is due to pre-puncture trauma. This impression is confirmed if the red blood cells, when examined immediately, are crenated or if the supernatant spinal fluid shows a definite xanthochromia.

When we obtain any bloody spinal fluid, we always do both red and white blood cell counts and compare them with the blood counts to eliminate the possibility of coincident meningitis and trauma. In at least 2 instances in the past 5 years we have had patients with acute serous meningitis in whom there was blood uniformly present in the spinal fluid.

We consider any patient whose spinal fluid shows an increased leukocyte count as having meningeal inflammation; meningitis or encephalomyelitis is present in all such cases. Therefore, whenever we find a patient with increased leukocytes in a nonhemorrhagic spinal fluid, or with an excess of leukocytes in a hemorrhagic fluid, we make immediate studies to determine the type of meningitis or meningoencephalitis that is present. These studies include a culture of the spinal fluid on chocolate agar or in tryptose phosphate broth to which 1 per cent hemoglobin has been added, total and differential leukocyte count, Pandy test for increased globulin content of the spinal fluid, quantitative determination of dextrose, and immediate search for organisms in rather thick films of the centrifuged sediment stained by both methylene blue and Gram stains.

Our first effort is to determine whether the meningitis is serous or purulent in nature. A serous meningitis is one characterized by an exudation of mononuclear cells, chiefly lymphocytes, in the spinal fluid, while a purulent meningitis is one in which the majority of the cells present are pus cells or polymorphonuclear leukocytes. In general the cell count is higher in purulent than in serous meningitis, although in some instances, as in fulminating pneumococcal or meningococcal meningitis, there may be very few cells in a purulent infection; on the other extreme we have had serous meningitis with 2,000 or 3,000 cells.

Serous meningitis may be caused by the virus infections, such as lymphocytic choriomeningitis, poliomyelitis, and the primary and secondary encephalitides; or by bacteria, such as tuberculosis; by spirochetes as in syphilis or leptospirosis; by fungus infections, such as torula or toxoplasmosis; by chemical irritation as in the encephalitis of lead poisoning in children; by chronic irritation, as with chronic inflammatory processes impinging on the meninges; or by some unknown agent. There is little possibility of making an immediate exact etiologic diagnosis between the different types of serous meningitis, although there are certain helpful leads that may be established.

In the virus infections there is little beyond the clinical history and physical findings to establish an exact etiologic diagnosis before animal inoculation studies, which often require several weeks, can be made. If the illness follows any of the acute exanthemata or other virus infections and is associated with encephalitic manifestations, we assume that it is due to the specific virus of the preceding infection. If paralyses are present, the illness is diagnosed as acute anterior poliomyelitis. A primary virus meningitis, as acute lymphocytic choriomeningitis, is suspected when the dextrose content is normal, and there is a moderate or high cell count ranging from 1,000 to 3,000 cells with 90 per cent or more of the cells being lymphocytes. However, there are a surprising number of patients with such findings, and even more with a similar picture but cell counts of less than 1,000, for whom we can establish no exact virus or other etiology.

If there is a strongly positive Pandy test and a low spinal fluid dextrose, tuberculosis meningitis must be suspected and ruled out. The diagnosis can be made definitely by demonstrating acid-fast bacilli in the sediment of the concentrated fluid. This is best done by the method of Hanks and Feldman[3] although it may be somewhat time-consuming. A presumptive diagnosis can be made by finding a serous spinal fluid with markedly increased globulin and low sugar in a patient with demonstrable tuberculosis elsewhere in the body. A low spinal fluid chloride content is said by some to indicate a tuberculous meningitis. We have derived little help from the test, since we find very low chloride levels in the fluid of any patient who is vomiting severely. The diagnosis of syphilitic meningitis must await the return of the spinal fluid serology which usually establishes the diagnosis without doubt within a day or two. Weil's disease, which may show a serous meningitis, is diagnosed by positive agglutination reactions in a jaundiced patient.

Chronic infection impinging on the meninges can be detected often only by careful and exacting clinical study. Lead poisoning with encephalitis usually occurs in children. The spinal fluid cell count is rarely over 200 to 300 cells with lymphocytes predominating. Blood studies, roentgenograms of the long bones, and quantitative determinations of lead excretion in the urine establish the diagnosis. A fungus infection of the meninges must always be suspected when the spinal fluid is under markedly increased pressure with a pleocytosis, but with no definite chemical changes, and can be diagnosed conclusively by demonstrating the fungi on smear or culture or in a pathologic section. We have recently encountered an acute serous meningitis as an early complication of scarlet fever. The clinical impression is that it is due to a virus infection, but the etiology is as yet unknown.

In view of our futile efforts to make an immediate exact etiologic diagnosis in the various types of serous meningitis, it is fortunate that our chief reliance in treatment is supportive care and that to date there is no specific therapy for any one variety that greatly alters the outcome. Therefore, when we make a diagnosis of serous meningitis, we may be content to support the patient and await more leisurely laboratory results.

The same complacent attitude cannot pertain with purulent meningitis, however. In these types the treatment differs radically with the different etiologic organisms; and if therapy is to be maximally effective, it must be instituted immediately and completely. Therefore, we feel that an exact etiologic diagnosis can and must be made within an hour or two after spinal puncture in a large majority (approximately 90 per cent) of patients with purulent meningitis.

Purulent meningitides are due to the meningococcus, *Hemophilus influenzae*, and members of the colon-typhoid groups of organisms that are decolonized by the Gram stain, and to the pneumococcus, streptococcus, and staphylococcus that retain the Gram stain. Rarely any other pathogenic bacteria and very rarely bacteria not ordinarily pathogenic may cause a purulent meningitis. And finally, purulent meningitis not infrequently is caused by an acute pyogenic process that impinges on the meninges as, for example, mastoid abscess, brain abscess, or septic emboli in the cerebral cortex in subacute bacterial endocarditis.

The differentiation between the various pyogenic organisms causing meningitis ordinarily is not difficult. The final confirmation of the diagnosis obviously often must await the outcome of the culture. This routinely is made at the time of the initial lumbar puncture by dropping 5 to 8 drops of spinal fluid directly from the spinal needle onto chocolate agar slants, 2 slants being inoculated. Following this, at least 2 containers of spinal fluid are obtained. One is used for total and differential cell counts, the other for immediate bacteriology. The fluid is centrifuged at high speed for approximately 5 minutes, the supernatant fluid is decanted for dextrose determination, and relatively thick films of the sediment are stained by Gram's method and by methylene blue. The latter stain is preferable to visualize the organisms and to define their morphology. The Gram stain is utilized to determine the staining reaction by this technic and thus greatly facilitates the presumptive diagnosis. If organisms are seen, they almost certainly will be either cocci or bacilli. The cocci will either lose or retain the Gram stain. If the cocci lose the Gram stain, or are Gram-negative, their morphology will be that of biscuit-shaped diplococci, the meningococci. If these organisms are present in fair numbers, they can be typed, using the Neufeld technic exactly as it is applied to the pneumococcus. Groups I and IIa meningococci have capsules and are typable by this technic, thereby being positively and immediately identified. Groups II and IV do not have capsules and cannot be so identified. However, since group IV is rarely encountered at the present time if a Gram-negative, biscuit-shaped diplococcus that will not type with groups I and IIa sera is found in reasonable numbers, it is probable that it is a group II meningococcus. The gonococcus, which has identical morphology and staining properties is encountered so rarely as to merit little consideration. If the organisms are present in numbers too few to type directly, the presumptive diagnosis of meningococcal meningitis is still tenable and can be confirmed by typing by agglutination on the culture when it grows out.

If Gram-positive cocci are demonstrated in the spinal fluid, they may be either pneumococci, streptococci or staphylococci. These organisms are not readily differentiated by morphology and staining reactions. However, it is our practice to attempt a pneumococcus typing by the Neufeld technic on all such Gram-positive organisms. (They ordinarily are present in abundant numbers for such typing.) If a pneumococcus typing is obtained, the definitive diagnosis is made and exact serologic and chemical therapy is started immediately. If no type of pneumococcus is obtained the organism is presumed to be either a streptococcus or a staphylococcus. These may be differentiated partially on the basis of morphology, the streptococcus being less round and occurring in short chains, the staphylococcus being quite round and appearing as clusters or groups of 4. A definite diagnosis must await the outcome of the culture.

If bacilli are seen in the spinal fluid, they will be Gram-negative in almost every instance. However, their morphology will be very suggestive. The *Hemophilus influenzae* is quite pleomorphic; it varies tremendously in size and shape, whereas the colon organisms are of uniform diameter and vary only in length. In any case an attempt is made to type the *H. influenzae* by the Neufeld technic. We use only the type b antiserum, since this is the only type *H. influenzae* found in the spinal fluid in a primary meningitis. If, as rarely occurs, a pleomorphic organism that does not type with type b serum is found, it may be another type of *H. influenzae*, but if it is, a portal of entry must be sought through a skull fracture or a purulent sinusitis. If a nonpleomorphic bacillus that will not type with type b *H. influenzae* antiserum is found it almost certainly is a member of the colon-typhoid group which can be identified positively only by careful culture.

There remains only the situation in which no organisms are found in a purulent spinal fluid. In this instance the spinal fluid dextrose content, which is markedly reduced in all forms of bacterial meningitis, is of utmost importance. If the spinal fluid dextrose is reduced, then a bacterial meningitis is probably present. All of the common pathogenic bacteria may cause meningitis without being demonstrable on direct smear of the centrifuged sediment, but the meningococcus is the most frequent offender of this type. Therefore, whenever the spinal fluid dextrose is reduced and when no organisms are demonstrable on direct smear of the spinal fluid sediment, we make a presumptive diagnosis of meningococcal meningitis, and this is changed only by culture reports. Fortunately, in bacterial meningitis the virulence of the infection roughly parallels the number of organisms. When no organisms are demonstrable on smear, specific treatment accessory to the use of the sulfonamides is less urgent and can await the culture reports or even be eliminated entirely.

If the spinal fluid dextrose is within the normal range, then a bacterial meningitis is extremely unlikely, and we make a tentative diagnosis of a purulent focus impinging on the meninges, such as a brain abscess, mastoid abscess, or subacute bacterial endocarditis with septic cerebral emboli. Careful examination is made for these foci for further diagnosis.

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President's Page

WHAT ARE OUR MOTIVES?

As we are frequently reminded, the outcome of the globular struggle in which our country is now engaged will determine the kind of a world in which we shall live. This conflict over ideologies, however, is not confined entirely to world affairs. In fact it is very much in evidence on the domestic scene where issues are becoming more clearly defined. What kind of a society do we want in the years following war? Do we want an all-powerful paternalistic government? If so, are we ready to accept regimentation to a greater degree than we have known? Or, on the contrary, are we in favor of decentralization of power and greater opportunities for the individual?

This is no time for wishful thinking. We must be honest with ourselves and others. Are we in the medical profession fully cognizant of our responsibility for the future America? What attitude should we as physicians take in regard to the pressing questions of the day? Have we been fully justified in the attitude we have taken toward social and economic questions as they relate to medicine?

I feel that, on the whole, our position has been sound. However, the arguments for our point of view, I think, have frequently been unimpressive. Too often we have given the impression, which I believe at times has had a basis in fact, that our motives are selfish. Certainly our yardstick must not be a mercenary one for if it is we deserve the severest condemnation. Medicine must be kept on a much higher level than the market-place. For medicine is still a great profession. It demands of its honest and capable practitioners adherence to the highest ideals and freedom to serve patients as their judgment dictates.

As regards freedom of action, the medical profession cannot disregard its obligation to protect patients against those in its ranks, even though they be a small minority, who are dishonest. This is something we must do ourselves or it will be done for us.

Are these views too high-flown? I think not, for if we are to continue as a great profession we must meet new social conditions realistically, at the same time holding fast to our ideals. I am confident that upon their maintenance will depend the success of our plans for the future.

Fred R. Sanderson

Editorials

COLD HEMAGGLUTININS

There has been a good deal of interest in abnormal blood agglutinins which are active toward all types of human red blood cells, including the cells of the patient (autoagglutination), and to some extent the cells of other animal species. Because one such type of abnormal agglutinin is active at temperatures lower than 37°C., and because the agglutination is reversible at temperatures of 37°C. or higher, the descriptive term "cold hemagglutinin" has been applied.

The presence of cold hemagglutinins in significant titer has been reported to occur occasionally in a wide variety of diseases. For the most part, however, the test for these abnormal agglutinins had little diagnostic value until about a year ago, when it was reported[1] that the majority of a group of patients with primary atypical pneumonia had high titers of cold hemagglutinins. These results have since been confirmed,[2] and it has been pointed out that although the test is not specific it may have considerable value in verifying the diagnosis in some cases of atypical pneumonia, particularly since this is the only infectious disease besides African trypanosomiasis in which the test is consistently positive. The value of the test is perhaps all the more significant in view of the fact that we have heretofore lacked any means of segregating many cases of atypical pneumonia and have often been in doubt of the correct diagnosis even in retrospect. In atypical pneumonia cold hemagglutinins appear in the blood after the first week and reach maximum titers at or near the end of the febrile period. Usually the titers rapidly decline during convalescence. It is still uncertain whether or not there is any relationship of the titer to the clinical severity of the disease.

There is some evidence to indicate that the presence of cold hemagglutinins may occasionally be an important factor in the development of complications in atypical pneumonia. Peterson, Ham and Finland have suggested that instances of phlebothrombosis and pulmonary embolism observed in the latter part of the clinical course of the disease may be related to the tendency to autoagglutination. Helwig and Freis[3] have reported a case in which severe acrocyanosis on exposure to cold occurred as a sequel to atypical pneumonia and apparently as a result of persistence of cold hemagglutinins in the blood. Similar cases of disturbed peripheral circulation due to autoagglutination at cold temperatures have been previously reported but without a background of atypical pneumonia. For example, Stats and Bullowa[4] have recorded a case in which episodes of mild arterial insufficiency appeared as the result of autoagglutination whenever the patient was exposed to cold. Finally, after an unusually drastic exposure, the patient developed gangrene of the tips of the extremities, apparently because the intense autoagglutination occluded many small peripheral blood vessels. No cause for the presence of a cold hemagglutinin was discovered in this case.

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[1] Peterson, O. L., Ham, T. H., and Finland, M.: Science, 1943, 97, 167.

[2] Horstmann, D. M., and Tatlock, H.: J. A. M. A., 1943, 122, 369.

[3] Helwig, F. C., and Freis, E. D.: J. A. M. A., 1943, 123, 626.

[4] Stats, D., and Bullowa, J. G. M.: Arch. Int. Med., 1943, 72, 506.

There are other interesting aspects to this subject which deserve at least brief mention. It is known that abnormal hemolysis may accompany cold hemagglutination. In the case of Stats and Bullowa cited above, hemoglobinuria was associated with the episodes of autoagglutination. The authors who have discussed the incidence of cold hemagglutination in atypical pneumonia have implied that they believe that the instances of acute hemolytic anemia observed in a few of their patients may have been related to the presence of the abnormal agglutinin. Dameshek[5] has reported three cases in which acute hemolytic anemia developed in the course of an acute infectious disease and following the administration of sulfathiazole and sulfadiazine. Two were cases of atypical pneumonia, the third a case of infectious mononucleosis, and in all three cold hemagglutinins were present in high titers. Although the exact mechanism whereby cold hemagglutination may favor hemolysis of erythrocytes is unknown, it has been demonstrated that the phenomenon may exist in the absence of any other hemolytic factor.

Finally, Dameshek has emphasized that cold hemagglutinins may be important in connection with transfusion procedures. Their presence in a patient needing blood may cause agglutination of the red cells of all donors tested, group O or otherwise, when testing is done in the usual way by the slide technic at room temperature. The patient may therefore be classed as "incompatible" and the needed transfusion postponed until his condition is critical. This kind of difficulty can be prevented by use of the Landsteiner-Levine test tube technic at both ice box and incubator temperatures. With this technic it will be discovered that the patient's blood contains a cold hemagglutinin, compatibility with donor's cells at incubator temperature (37°C.) will be demonstrated, and transfusion can be judged to be safe providing that care is taken to keep the blood continuously warm during the entire procedure.

H. H. H.

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[5] Dameshek, W.: J. A. M. A., 1943, 123, 77.

JUVENILE DELINQUENCY

Much is heard nowadays of an alleged "wave" of juvenile delinquency. Juvenile offenses are well publicized, and certain types of offense, particularly sexual promiscuity among young girls, are demonstrably more frequent. It is probably a mistake, however, to fancy us as on the verge of being overwhelmed by the flood.

There is no one cause for any given behavior, delinquent or otherwise; many factors, past and present, are at work on the individual, and their influence in time is modified by his previous experiences, his intelligence and his temperament.

In time of war the normal aggressive impulses are heightened. To hate the enemy is a necessity, and this readiness to exhibit aggression may overflow, so to speak, into such conduct as robbery, larceny, or sex offenses. Tensions of all sorts are increased, and a general feeling of insecurity is manifest, especially among the younger age groups who have not the stabilizing advantages of years and a career. Children sense these tensions in their parents, and often "act out" their conflicts in the form of delinquent behavior. Standards are somewhat relaxed, and the supervision in many homes is seriously impaired through the outside activities of the parents, as in war work.

One of the strongest supports which one can find in a time of uncertainty is the assurance that he is a part of a group, a cohesive group made up of people with similar aims. The OCD has pointed the way to a development of morale in this manner, and the participation of school children in scrap and other drives is a steadying influence.

There is no royal road to the prevention of delinquency, but all can contribute. Understanding and sympathy with the problems of young people, adequate supervision and the provision of suitable channels whereby the younger generation may express their drives to be a worthwhile part of a social group, all will do their part toward reducing the toll of wartime delinquency.

W. O.

CAUSES OF DEATH

Certification of causes of death is an important requirement for vital statistics. Obviously the medical profession is the one group that is best qualified to furnish information for this purpose.

It is to the credit of the medical profession to have been in the forefront of various professional as well as non-professional groups that have pressed for the establishment of bureaus of vital statistics, both nationally as well as in the various states.

In order that the information brought together for statistical purposes be of value, it is essential that the report forms be uniform. Only in this way can reasonable comparability in statistics be hoped for.

The foundation for uniformity, and so comparability, has been laid by the adoption by the states of the so-called model Vital Statistics Law, drafted by the Bureau of the Census in 1907 with the help of the American Medical Association, the American Public Health Association, American Bar Association, and various other national societies and agencies.

While the principles expressed in this Statistical Law primarily deal with the form of the report, progress has also been made in dealing with the more difficult aspect of vital statistics, namely, the classification of the causes of death.

Through a series of conferences with representatives from other countries there has been worked out the International Listing of Causes of Death. This is a system for classifying causes of death and was officially adopted by the United States in 1900. This listing which is revised every decade to keep it abreast of changes and the development in medical science, at the present is composed of 200 separate titles, arranged under 18 major groups.

Manifestly, it is not a perfect instrument; nevertheless it is a means toward better and more accurate statistics.

However, it must be clear that the value of the information brought together and tabulated in conformity with these statistical guides is first and last dependent upon the care and accuracy which the individual physician will apply in making out a death certificate. The standard certificate calls first for the immediate cause of death. Here should be stated the disease entity which in the judgment of the physician was the immediate cause of death. Next the physician is asked to state the underlying cause of death. This should state the disease entity or condition that led up to the immediate cause of death. For example, an automobile accident, with fracture of the pelvis, confines an elderly person to bed and becomes responsible for hypostatic pneumonia. Hypostatic Pneumonia would be the immediate cause of death and the underlying cause of death would be: Automobile Accident. For statistical purposes this death would be charged to Automobile Accident.

Confusion and inaccuracy result when the physician fails to record a recognized cause of death, listing symptoms rather than disease entities, or again, when the time element is ignored. Unless the physician is reasonably certain of the underlying cause of death, it will be safer to state only the immediate cause of death. In illustration of what happens, the following two death certificates recently received in the Bureau of

Vital Statistics of the District Health Department are presented in brief:

Case 1	Female aged 58.	
	Immediate cause of death	Duration
	Chronic Myocarditis	18 months
	Due to Asthma Bronchial	18 months

In this case the cause of death for statistical purposes is chronic myocarditis.

Case 2	Female aged 37.	
	Immediate cause of death	Duration
	Myocardial Failure	———
	Due to Bronchial Asthma	———

This second death certificate is manifestly unsatisfactory. Myocardial Failure is not a recognized disease entity in the International Listing of Causes of Death. No information is given concerning a condition affecting the myocardium. Since bronchial asthma is, however, a recognized cause of death, this death will be classified as due to bronchial asthma, although the asthma may have been of cardiac origin.

Caution should be particularly exercised in cases of chronic tuberculosis and chronic syphilitic infection as a cause of death. In neither instance may these infections be directly or remotely responsible for the deaths, which may be due to myocarditis or nephritis, quite apart from the specific infections. However, if these diseases are mentioned in a causal relationship, the death will inevitably be classified as due to these specific causes. The physician may, however, list the syphilitic infection or the tuberculosis under "Other Conditions." A similar misleading classification may result in the instance of cancer. The immediate cause of death may be quite different from cancer; yet if cancer, which may be entirely in an incipient state, is mentioned in the death certificate, cancer would be given the preference in the classification of the particular death. In this instance, noting of the time element that the cancer has existed and the location of the cancer are of the greatest determining importance.

The value of vital statistics will grow in proportion as the medical profession will give them more attention.

George C. Ruhland, M.D.

In and Out of Focus

BY THE OBSERVER

Health Program for Government Employees

In a press release on February 17, the U. S. Civil Service Commission stated "that the time is overdue when the Federal Government should establish a sound health program for its employees." The Commission has submitted to the Congress a bill which "would give Federal departments and agencies including corporations owned or controlled by the Government, authority to establish by contract or otherwise employee health programs" under which health services for employees under their respective jurisdictions will be provided. These services would be established "only upon recommendation of the Civil Service Commission after consultation with the Public Health Service and shall be limited to treatments of minor illnesses except in cases of emergency or of injury or illness sustained while in the performance of the employee's duty." Preëmployment and other examinations, referral of employees to private physicians, and educational and preventive programs relating to health, including the alleviation of health hazards in the working environment, are also included in the bill's provisions.

The Civil Service Commission will collaborate with the Public Health Service "with respect to the extent to which such services shall be available."

Some weeks ago, Chairman Jennings Randolph of the House District Committee urged the need for legislation such as has been proposed by the Commission. Mr. Randolph said, "I have been shocked to find that the Federal Government lags behind private industry in providing health measures for employees. Many private employers with even 1,000 workers or less have found that it pays to maintain a full-time medical officer. Yet here in our own Federal service we have large departments with 50,000, 60,000 and 100,000 employees often without a single medical officer to plan for the conservation of employee health."

The *Washington Post* in an editorial on February 20, 1944, refers to the proposed health program for Government employees as "elemental." "We are not assuming," the *Post* said, "that the plan for free medical aid outlined in the latest British White Paper would be applicable here. Every country must work out social problems of this sort in its own way. What we do say emphatically is that our own Government has been inexcusably slow in applying the known principles of good health to its own employes, to say nothing of service to the public generally."

★

Medical Service Plans Council of America We may well rejoice in the fact that doctors over the country are becoming acutely aware of the need for constructive action. A demonstration of this fact was the meeting of the Medical Service Plans Council of America which was held at Chicago on February 12. Representative physicians and laymen employed by medical organizations throughout the country were in attendance. Unusual interest was shown by this group in the progress being made by various medical service plans.

The following program was presented: "Prepaid Medical Service vs. the Wagner Act," Mr. Jay C. Ketchum of the Michigan Medical Service; "Hospital and Medical Service Plans," C. Rufus Rorem, Director, Hospital Service Plan Commission; and "Relationship of Hospital and Medical Service Plans Corporation," Dr. Ira H. Lockwood, Surgical Care, Inc. Mr. John Pratt of the National Physicians' Committee spoke on the general medical situation and advocated the establishment of prepayment medical service plans.

As might be expected, participants did not always stick to the subject under discussion. There was some disappointment in this regard because most of those present were there to learn about the organization and administration of medical service plans. However, formal organization of the Council was proposed and a constitution presented for the group's consideration. When the latter has been adopted, the Council will undoubtedly fulfill its purpose more adequately.

Officers elected at the meeting were: Mr. Jay C. Ketchum, President; Dr. Norman H. Scott, Vice President; and Dr. Frank L. Feierabend, Secretary.

★

Administration Is Costly "With some notable exceptions, the medical profession suffers from lack of adequate administration. This deficiency is most apparent in sociologic planning and public relations." So writes Dr. Wilmar M. Allen, Medical Director, Hartford Hospital, Hartford, Conn., in the February 1944 issue of the *Connecticut State Medical Journal*. He finds nothing surprising in this situation for he says:

> "From the memorable day of attending his first patient in medical school through his long life, the practicing physician is living and must practice in a highly individualistic manner; and he does so in the presence of the emotions of birth, illness, accident, tragedy and death. It is an inescapable concomitant of the patient as a human being. Thus living his life by day and by night, it is expecting the superhuman, nay, the impossible, that in his spare time the practicing doctor should become a philosopher, economist and sociologist."

Nevertheless, he says that physicians are inclined to look upon themselves as experts in this field.

> "As physicians we would not think of practicing medicine without consultation, but we seem to be perfectly willing to enter the arena for sociology and economics, about which we know far less than we do about the fields of our medical consultants. As far as I can determine, we have made only minimal and rather niggardly attempts to recognize and meet this situation. What we cannot do for ourselves, we must employ qualified persons to do for us. For this we [in Connecticut] pay the munificent sum of $19 per year, of which we have just eaten 75 cents worth. The subscription of $8.00 per year for the A. M. A. Journal may be helpful, but is not obligatory. So, for $18.25 per year we expect to buy all those things which we have neither the time nor capacity to do. Although no reliable data are at hand, I believe you will agree that an average income of $5,000 per year for the physicians of Connecticut is a conservative figure. In view of that, $18.25 is a ridiculous amount to spend to develop medical care for the people and to protect medicine from insidious controls.
>
> "The Connecticut State Medical Society took a long step ahead when it raised its dues and employed a full time secretary. But it is asking the impossible to expect him to have the time, endurance or capacity, to be, in addition, public relations counsel, legal counsel, economic counsel, insurance counsel, war counsel and sociologic counsel. If we would employ such additional counsel, both for the State and nationally, we would be in a much sounder position. What we have not done and cannot do for ourselves, we must get done for us. And in the long run, we will get only what we are willing to pay for. Good administration costs money, but is worth it, as every business will testify.
>
> "It is interesting that by natural evolution and without protest from medicine, much of the administration of medicine is in lay hands."

★

"... Whence Springs This Messiah?"

Last November an article appeared in the *Journal of the Indiana State Medical Association* entitled "Anatomical Dissection of Paul deKruif's Book, 'Kaiser Wakes the Doctors' " by Dr. Floyd T. Romberger. The title of Dr. Romberger's article we thought somewhat misleading. Not that he failed to dissect deKruif's book. In fact he went far beyond that and indulged in a scathing denunciation of Mr. deKruif personally.

Your Observer wishes it clearly understood that he does not approve of Mr. deKruif's views on the social and economic aspects of medicine. In fact he finds them naïve and often maudlin. And what is most to be regretted he does not always have his facts straight. Too often his appeal is to prejudice rather than to reason. However, this does not, in our opinion, justify an attack upon him personally even though, as Dr. Romberger says, Mr. deKruif in his book takes unlimited liberties with the personal pronoun "I."

Dr. Romberger writes, "... whence springs this messiah?. . . . By his own definition, . . . he is a reporter and, as we see it, not a physician. No, he does not possess the necessary qualifications!" A little later on he writes, "Paul deKruif is not an M.D. He is not a physician. No, he does not possess the necessary qualifications!" This latter phrase is repeated at other points throughout the article.

Of course, Mr. deKruif is not a physician. However, this alone does not disqualify him as a writer on medical subjects. In fact there are a number of lay writers in this country today who, in the opinion of many medical leaders, are highly competent in this field. For example, not a few representatives of the press specializing in scientific and the non-scientific phases of medicine have won the respect of the most critical physicians.

Mr. deKruif, despite his recent book and other contributions on medicine, has had a long and successful experience as a writer. Although not a physician, he was granted Bachelor of Science and Doctor of Philosophy degrees at the University of Michigan, the latter in bacteriology. He served as a Captain in the Sanitary Corps in World War I and at one time was employed as a bacteriologist by the Rockefeller Institute.

We do not wish to enter into an argument with Dr. Romberger for your Observer differs as violently with Mr. deKruif as he does. He feels, however, that no good can come of indulging in personalities. There are plenty of sound arguments against the views expressed in Mr. deKruif's recent book, a number of which are included in Dr. Romberger's article.

★

Are We Organized?

Not infrequently doctors complain that organized medicine is not organized. In other words, that it is not as effective as it should be in dealing with problems of a non-scientific nature confronting the medical profession. The author of an article entitled "Let's Organize," which appeared in the February 1944 issue of the *Westchester Medical Bulletin*, takes this view. To organize, he reminds his readers, is to "become systematized or constructed into a whole of interdependent parts." He says the A. M. A. is not "organized" and should not be in the accepted sense for "its field of scientific endeavor is too vital to permit dispersal of its efforts." He offers the following solution:

> "The machinery for organizing is ready to hand; it is almost complete. Only one step is necessary to make it effective. Physician members of county societies now contribute annual dues to their local societies. These in turn contribute a portion of these dues to the State society. County and state societies are interested and vocal in the economic as well as the scientific aspects of the practice of medicine. Only one step remains. The state societies should organize nationally and should contribute a portion of their dues for that purpose—call it 'National Congress of State Medical Societies'; call it 'National Congress of American Physicians'; call it what you will—with headquarters established in Washington, D. C. Such a 'Congress' would be financially supported by the physicians of this country and responsible to them; it would be interested primarily and solely in the economic and legislative problems of the practice of medicine—and we should point out that the person practiced on is just as much a part of the practice of medicine as the person who does the 'practicing';—it would concern itself with the betterment of the public interest as well as the betterment of the individual physician where this does not conflict with the public interest. Such a 'Congress' would frankly represent the medical profession in economic and legislative matters; it would pay an income tax as a matter of course, without any attempt at evasion; it would deserve and would gain the respect of every organization, of every citizen, as an open and above-board attempt on the part of the medical profession to present its case fairly and freely; it would do away with any necessity for academies, special committees or surreptitiously subsidized groups acting as 'spokesmen' for the medical profession; it would leave the American Medical Association free to pursue its 'promotion of the science and art of medicine and the betterment of the public health' without being besmirched and discredited by inept attempts to present the doctors' case in legislative matters."

Rather interesting, but your Observer is unimpressed. In his opinion this is only another manifestation of the unrest which is prevalent among physicians at the present time. If every member of the A. M. A. fulfills his obligations to his county or state society, we have ample organization to cope with our problems.

★

Violations of District Healing Arts Practice Act

On February 14, Dr. George C. Ruhland, Secretary-Treasurer of the Commission on Licensure for the District of Columbia, wrote a letter to the superintendents of all hospitals in Washington. The letter reads as follows:

> "This Department has recently received complaints that physicians from nearby Maryland and Virginia who are neither licensed nor registered in the District of Columbia are bringing patients into local hospitals. This, as you can readily understand, is a violation of the D. C. Healing Arts Practice Act and manifestly unfair to the local medical profession.
>
> "Will you please coöperate with us by advising any physicians in the above category that they may obtain a borderline registration certificate upon proper application; thus legalizing their present activities in this jurisdiction. The application, obtainable from this office, must be accompanied by a letter from the Secretary of either the Maryland or Virginia State Board of Medical Examiners, stating the applicant holds an unrevoked license to practice in the respective state; photograph and $1.00 application fee."

Dr. Ruhland has requested the coöperation of the Medical Society of the District of Columbia so that its members in nearby states will be apprised of District requirements.

Borderline registration is required in Maryland. Physicians in the District who perform operations or work in Maryland hospitals in the Metropolitan Area should therefore obtain a certificate from the licensing board in that state. No such reciprocal arrangement is in effect in Virginia, and inquiry reveals that none is contemplated, although your Observer was assured by an official of the licensing board that he is sympathetic to the idea.

★

Federal Narcotic Regulations

A few weeks ago members of the Medical Society of the District of Columbia received a copy of a bulletin sent to all members of the District of Columbia Pharmaceutical Association, Inc., containing an announcement by the Federal Bureau of Narcotics which reads as follows:

> "It has come to our attention that some stores are taking narcotic prescriptions over the telephone. For your information we are quoting Article No. 172, Regulations No. 5, of the U. S. Treasury Department Bureau of Narcotics. The article is as follows:
>
> " 'Art. 172—Telephone orders—The furnishing of narcotics pursuant to telephone advice of practitioners is prohibited, whether prescriptions covering such orders are subsequently received or not, except that in an emergency a druggist may deliver narcotics through his employee or responsible agent pursuant to a telephone order, provided the employee or agent is supplied with a properly prepared prescription before delivery is made, which prescription shall be turned over to the druggist and filed by him as required by law.'
>
> "This means that only in a case of emergency can a druggist deliver a narcotic prescription pursuant to a telephone order, but that the prescription properly prepared must be supplied before the delivery can be made."

Protests have been made by physicians who are already heavily burdened that enforcement of the above regulation in emergencies will work a severe hardship on patients as well as medical practitioners. However, the Federal Bureau of Narcotics takes the position that it has no alternative, although in legitimate emergencies assurance is given that it will not be unreasonable.

★

War Agency Requests Society's Coöperation

Since early November, 1943, a nursery for the benefit of servicemen's wives, their small children and babies who are passing through Washington, has been operated by the Child Care and Protection Committee of the Civilian War Services Division of the District of Columbia at the new United Nations Service Center near the Pennsylvania Station. Recently the Society was asked if its members living in the vicinity of the Center would be willing to list their names with the nursery and to answer calls in cases of emergency. Mrs. Luther Gulick, Chairman of the Subcommittee for Nursery Unit, stated that no great number of such calls were anticipated but that "it would be over-optimism to expect that there will never be emergencies." In regard to payment for medical services she stated that many, if not most, of the cases would be entitled to benefits under the Emergency Maternity and Infant Care Program for the Wives of Enlisted Men. However, there would be instances where children of commissioned officers would be in need of emergency treatment. In this event, of course, physicians would be paid the regular fee. In a few cases no payment will be possible.

The Society at its meeting on March 1 voted to coöperate with the Child Care and Protection Committee and to advise Mrs. Gulick that in the event of an emergency calls for physicians should be referred to MEDICAL BUREAU.

★

"Nervous Nellies" Can Take It

The increase of mental diseases particularly in our armed forces has been a source of concern to the medical profession. Your Observer has heard several speakers on this subject in the past year, and they have little to offer that is new. Nevertheless it is true that valuable experience has been gained by psychiatrists on the various battlefronts. Reports would indicate that more effective methods of treating psychoneuroses have been developed.

It is a generally accepted fact that those who break under the strain of combat duty have a tendency which was present in civilian life. In their peacetime pursuits they carry on without any difficulty. But the military services is no place for them. So every attempt is made to weed them out at induction centers.

Without any thought of challenging this procedure, your Observer presents the observations of a fighting man for what they are worth. General Pedro del Valle of the U. S. Marine Corps gave an interesting and perhaps significant sidelight on prevalence of psychoneuroses among the troops under his command at Guadalcanal and Tarawa when he addressed the Victory Dinner of the George Washington University Medical Society on February 19. General del Valle said that, surprisingly enough, it was not those whom he described as the "Nervous Nellies" who failed to stand up under battle conditions, but the steady, athletic type who had never shown any indication of emotional instability and upon whom he counted no matter how tough the going. He said the "Nervous Nellies" were no worse off after a battle experience than they were before.

From which it would appear that even where the most careful selection is made, men who are subjected to long and continued stress may break at least temporarily in spite of previous apparent stability.

★

Arizona Medicine Makes Its Bow

With the December 1943 issue, *Southwestern Medicine* discontinued publication for the duration of the war. Quite naturally it was not a particularly happy occasion for its Editor. He like most editors found his duties arduous but pleasant. But happily he has no regrets for he writes:

> "It has been work, yet fun. It has been pleasant to scratch monthly the itch to write. It has been a little gruesome at times to browse over the writings of former years, to be faced with the cold monuments of one's own words in printer's ink. Yet it is satisfying to know that none of those words have turned upon their creator, to torment with the query 'Why in the world did I say that?' "

Immediately following the withdrawal of *Southwestern Medicine* a new journal came into existence—*Arizona Medicine.* In its leading editorial entitled "The Birth of *Arizona Medicine,*" reference is made to its predecessor. The Editor comments:

> "While we regret deeply the loss of our many friends in New Mexico and El Paso [Texas], nevertheless the members of the State medical profession have long felt the need and necessity of its own journal. *Arizona Medicine* will be published bi-monthly."

We wish to compliment the Editor upon the appearance of the first issue of the new journal and to welcome it to the ranks of the state medical publications.

★

Army-Navy Night

One of the gala events of the year will be the ARMY-NAVY NIGHT which is to be held on Friday evening of March 24. Guests of honor on this occasion will be the wives and parents of physicians in the armed forces from the District of Columbia.

It has been tentatively planned to present a program which will be both serious and just plain fun. A nationally known public official has been invited to give a brief talk. Entertainment will, if available, be provided by members of the armed forces. The evening will close with a buffet supper.

Dr. Matthew White Perry has been appointed Chairman of the Committee on Arrangements. Members of the Committee are Drs. A. Magruder MacDonald, Allan E. Walker, Jr., Frederick A. Reuter and Bernard W. Leonard. Captain

(*Continued on page 132*)

War Section

LETTERS FROM PHYSICIANS IN THE SERVICES

The following are selected letters from Washington physicians in the armed forces. Not all letters received by the Secretary of the Society are suitable for publication. They may contain information which cannot be printed or which is of a routine nature. However, where it is possible and contents of communications are deemed of sufficient interest to our readers, they will be published.

From Captain Darrell C. Crain, ℅ Postmaster, San Francisco, Cal.:

Dear Ted: Thanks a lot for the gossip sheet of Dec. 4, which arrived two days ago. Boy, you were sure right when you "guessed it would not arrive overseas before Christmas." Even in the country where everything else is backwards (summer is in February, street cars run on the wrong side of the street, horses run the wrong way around the track, seats downstairs in the movies are *less* expensive than those upstairs, etc.)—as I say, even here Christmas is still in December—and the song "White Christmas" was just becoming real popular.

Since I last saw you, I have TRAVELED—ye gods, how I have traveled. First of all across the Pacific ocean—and if you do not think that is a bucket or two of water, you have only to get on a boat and steam for days and days without seeing a thing except more and more water—and an occasional bird which makes you know you are somewhere near land, but that is all. Of course, I thought that crossing the Equator was hot—but at that time I had not gone through a Tropical Summer in Australia—kiddo, there is a pip—and really something to write home about. Then my travels have also taken me through a good portion of Australia and I have had the unique experience of seeing more of Australia than the average inhabitant but very few of the population (in case that sounds rather confused I mean that I have seen a lot of the country but few of the people). I have traveled in all sorts of conveyances and slept on the floor of railroad cars, have slept on the coach benches of the better trains and slept on mail sacks in a mail car when there was no other place on the train to stretch out at night. I have gone three days running without being able to wash anything but my face and hands over a tiny bowl with a minimum of soap and water. Then I have traveled in an Australian motor convoy which stopped each morning and each afternoon for an hour while the drivers got out and boiled tea by the side of the road. Yes, indeed, I have traveled, and if I have time and the paper holds out I may go into more detail next week when I finally finish this harangue.

But I have had other experiences too—I have gone swimming in a now famous body of water where submarines occasionally pop up to make life interesting. I have hunted wild water buffalo and killed one too. I have dragged myself out of bed at midnight when the full moon lit up the camp and Tojo came over to chase us into slit trenches. However, I must admit that the barstards (here it is quite proper to call a person a "barstard," whereas no self respecting person writing to even a gentleman friend calls another a "bastard," even when referring to the Nips); as I said, I must admit that the barstards are such poor shots that to date I have not been able to get in the way of anything that would entitle me to the Purple Heart. I have seen numerous Australian aborigines who are spoken of as the most primitive people on earth today—and which I am willing to believe—(they do not even live in water-proof huts; all right, it rains, so what?). Many of the stories told about them, however, are now as legendary as the stories of our Indians, and belong to the same period of history.

So I might go on and on for some little time telling the things I have seen and done since leaving "the old country," but lest you think I am trying to convince you that I won the war single-handed, I must hurry to inform you that I have spent many a day sitting on my what the Army terms the butt and so far as medicine is concerned I have long since degenerated into a pen-pusher and turned my stethoscope into the scrap metal drive. And lest this present paper turns into meaningless drivel, I shall try to be somewhat more specific.

To begin with, this Station Hospital is located "somewhere in Australia," which is about as localizing as "somewhere in Canada." However, I do not think the censor will object to my saying that the view from my tent sure doesn't look much like Sydney harbor!!! And when I say that we are "rather isolated" that is a gross under-statement.

Unfortunately, we have to do some slight work around here so as to have some basis for drawing the monthly pay check—and said work has been interrupted by my weak attempt at literature. So before I get deeper into this thing I am going to sign off.

From Lt. Colonel Robert A. Bier, ℅ Postmaster, New York City:

Dear Ted: At long last I am overseas, something I have wanted since the last war. It is most interesting and promises to be even more so. Have a very important job that is in the future.

Best regards to you, Dr. McGovern, et al. Send me news letter, please.

From Lt. Ralph M. Crowley, St. Albans 12, Long Island, N. Y.

Dear Mr. Wiprud: This is to let you know that I appreciate the long letters you send us in the service and I wonder where you ever get the time.

My own job is not of an encouraging kind. It is to facilitate discharge of those who are useless or who get in the way of the war effort, through no fault of their own, but because screening did not keep them out. I was personally gratified to see that standards were not being lowered for the services. Psychiatrically speaking, many men are able to have outlets in civilian life and to do therefore useful work, who in the services become stymied and useless because of the unavailability of such outlets. These are the men who can work efficiently in war industries and who cannot do so in the services.

From Major Elmer W. Fugitt, ℅ Postmaster, New York City:

Dear Ted: Your letter of December 4, 1943 arrived today to provide some very interesting material for consideration through the long dull English evening. I have been in the Army for so long at this time that receipt of such a letter seems to come from another world entirely. My position as a regimental surgeon throughout my whole 3 years has much to do with this sense of isolation, for your field doctors are truly the forgotten tribe. Not even under the command of the Medical Service, they are pretty much left alone in their regiments, shunned by their relatively plutocratic hospital brethren. On the other hand, it has compensations.

Two points in your letter struck me favorably. One was the matter of postgraduate instruction. The narrowed limits of Army field medicine leave much of the whole field to deteriorate. Personally, I would feel most benefited by postgraduate work in the whole field of internal medicine, particularly embracing the newer concepts of disease processes and their treatment.

The other attractive feature of your letter was that of offering help in finding an office. Formerly operating an office at 200 R. I. Avenue, N.E., I was preparing to move to a downtown office when called to active duty. Now, after 3 years of being told where to go and what to do, I would almost be willing to be "assigned" an area where a doctor might be needed, though a downtown site still has its attractions.

From Captain B. P. Lafsky, ℅ Postmaster, San Francisco, Cal.:

Dear Ted: Your newsy letter of Dec. 4th was greatly enjoyed as usual so keep them coming.

There is so much written about Washington in newspapers and magazines that I feel familiar with the changes made even though I have been away for two years now. Old Sunday newspapers from Washington arrive here at irregular intervals but I read them as if they were fresh off the press. However, they merely increase the longing to see the home town, friends and folks again. What gets a man down here is the boredom and feeling of confinement. True enough, the place is beautiful except during the rainy season, but there is no place to go and very little to do in the evening. The Army does its best through special services to keep us entertained by movies, band concerts and an occasional show. Our entertainment is held in a large circus tent with a stage and some crude benches.

Last week we had a real live show from Australia with chorus girls and a good band. Just looking at those girls was quite a treat. Gary Cooper, Phyllis Brooks and Una Merkel paid us a visit and put on a show for us. We have movies three times a week but there is always some trouble getting them going; either the camera goes bad or there is a short or something happens to the generator or the downpour of rain drumming on the tent drowns out the sound. Nevertheless, almost everyone goes to the show because there is nothing else to do.

The food is adequate, consisting of canned foods mostly, but we have fresh meat and fresh eggs once or twice a week. Whan a ship comes in, we often have meat every day for a week; then we go without it for awhile. I have had my fill of canned Spam, Vienna sausage and bully beef. Fortunately, we are able to get fresh bread and butter almost every meal. That canned tropical butter is thick and greasy, abominable stuff. As for powdered eggs, don't believe what you read about them because nothing can make them taste like a fresh egg. They are all right for cooking and baking, though.

My promotion to Major came through in July and I am now executive officer of the hospital which has been redesignated the —— Station Hospital. We were very busy for awhile but have slowed down a little now. My job is chiefly administrative, a sort of glorified housekeeper and amateur engineer. Every medical unit has to assist in building its hospital and frequently has to do all of it. All sanitary facilities usually have to be planned and installed by the medics, such things as wash stands for mess kits, grease traps, incinerators and latrines. Disposal of waste water from kitchen, showers and sinks is always a headache. These things begin to give you an idea how far away from treating patients I am. For two years I have done administrative work so I am getting rusty in my medicine.

This brings me to the subject of postgraduate courses, although I am sure you still have plenty of time to plan them. The Army keeps us abreast of new developments through a monthly bulletin and frequent circular letters but I think some refresher courses in medicine and surgery, including all recent advances made, would not be amiss. Clinical subjects are important but I think the latest developments in chemistry, physiology and pathology should not be neglected.

Coming back to the hospital again, our wards consist of a frame of native logs with a roof of tar paper over which we have thrown tarpaulins or ward tents. The eaves come down low to keep out the rain but the sides of the ward are open all around. Floors are concrete and all wards now have electric lights. Our men put in a pipe line from a clear, cold mountain stream so we now have the luxury of running water except when it rains a lot and the pipe becomes obstructed.

The downpours of rain we sometimes have, have to be seen to be believed. The roads become impassable quagmires and a trip over them is an exhausting ordeal. Those little Jeeps are all right for fairly smooth terrain but deep muddy ruts and large rocks will sometimes strand them because they are built so low.

From Lt. Colonel Edward J. Grass, ℅ Postmaster, San Francisco, Cal.:

My dear Ted: Your letter of Dec. 4 just received, and it was indeed a pleasure to get all the news.

I don't know just yet what kind of a postgraduate course I would like to take that would be helpful. Will have to ask my wife first. Haven't seen her for over two years.

The prospects of getting back to the states soon look mighty slim. Am a little closer to Tokyo since last time you heard from me. Please give all my fellow members my deepest regards.

From Lt. Comdr. Daniel F. Lynch, U. S. Naval Hospital, San Diego, Cal.:

Dear Ted: The change over from civilian practice to the ways and manners of the Navy is at first not easy. However, if one is patient and tolerant and willing to wait, things usually come around to his way of practice and in very short order one finds himself practicing in about the same manner that he did at home. That, in a nutshell, is my situation.

So far, I like the Navy very much and I think the experience is going to be interesting and very good for me. Being in the Service makes me feel better in mind anyway.

Howard Kane is here in charge of obstetrics and I see him every day. We often have dinner together. Needless to say, he is doing a wonderful job here. I understand that Dr. Davidson has recently come aboard but as yet I have not seen him.

WOMAN'S AUXILIARY NOTES

Mr. J. Morton Franklin, Supervisor of the Victory Gardens of the District of Columbia, was guest speaker at the meeting of the Woman's Auxiliary to the Medical Society of the District of Columbia, February 9, 1944. Mr. Franklin, a former resident of the Puget Sound district, is a graduate of Oregon Agricultural College and has done postgraduate study at the University of Idaho and Cornell University. For the past twelve years he has been consultant horticulturist in the Washington area. Mr. Franklin urged that a great many people grow vegetables, utilizing even small areas, and that they choose vegetables which will produce most for the time and effort expended.

After the business meeting, luncheon was served in the Library under the direction of Mrs. George H. Crofton, who was assisted by Mrs. M. W. Ireland.

From January 17 to February 7, on Mondays, Wednesdays and Fridays, members of the Auxiliary sold bonds for the Fourth War Loan Drive at the Medical Society's building.

New members of the Auxiliary include Mmes. J. Blaine Harrell, Daniel Moffett, Max E. Feldman, John M. Gaines, Donald H. Leeper, Jr., John Edward Morris and Paul O'Donnell.

MRS. EDGAR E. QUAYLE
Publicity Chairman

CALENDAR OF MEETINGS

February 4	Grievance Committee
February 7	Procurement and Assignment Committee
February 9	Committee on Medical Bureau Scientific Meeting of Society
February 15	Board of Censors
February 21	Committee on Postgraduate Education
February 22	Subcommittee of the Committee on Medical Economics
February 23	Scientific Meeting of Society
February 25	Nominating Committee Committee on Medical Economics
February 28	Executive Board Committee on Arrangements for Army-Navy Night

MEETINGS

Wednesday, April 12

The Washington Gynecological Society will sponsor the following program:

1. "A Program for the Collection of Anti-Rh Diagnostic Serum," LOUIS K. DIAMOND, M.D., Assistant Professor of Pediatrics, Harvard Medical School; Investigator for the Committee on Medical Research, Office of Scientific Research and Development
2. "Rectal Pentothal Sodium as an Analgesic during Labor," SAMUEL M. DODEK, M.D., Associate in Obstetrics and Gynecology, George Washington University School of Medicine
3. "Personal Experiences in Sterility Work," HERMAN HERTZBERG, M.D.

Wednesday, April 26

The Washington Academy of Surgery will present the following program:

"Practical Considerations of Venous Thrombosis," MAJOR MICHAEL E. DE BAKEY, M.C., A.U.S.; Assistant Professor of Surgery, Tulane University of Louisiana School of Medicine (on leave of absence)

NOMINATIONS

The following nominations for elective offices were presented by the Nominating Committee in the order shown at the business meeting of the Medical Society on March 1, 1944:

For President-elect
William Earl Clark
Walter Freeman
James A. Gannon

For First Vice President
William M. Ballinger
Frank J. Eichenlaub
Fred O. Coe

For Second Vice President
Elizabeth Parker
Petrena Abbe Shea

For Member of Executive Board
Fred R. Sanderson
Roger M. Choisser

For Member of Board of Censors
Jesse T. Mann
Arnold H. McNitt

No additional nominations were made from the floor. Elections to the above offices will be held at the annual business meeting, May 3, 1944.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the business session, February 9, 1944:

Active Members

Raymond Schwartz, Captain, M.C., A.U.S., Station Hospital, Camp Butner, N. C.
John Alfred White, Room 217, Union Station

Associate Member

Joseph Patrick McMahon, 930 16th Street, N.W.

The following applicants for membership were duly elected to membership at the business meeting, March 1, 1944:

Active Members

Albert N. Baggs, 2324 Ashmead Place, N.W.
Allen S. Lloyd, 901 16th Street, N.W.
Bernard E. Nunez, 1611 31st Street, N.W.
Jed Williams Pearson, Jr., 1842 Burke Street, S.E.
Jacob S. Rosenthal, 900 17th Street, N.W.
Jerome A. Sansoucy, 1710 Rhode Island Avenue, N.W.

DR. PHELPS GREETED BY DR. SANDERSON
(*See story on page 127*)

Associate Members

Thomas A. Christensen, College Park, Md.
Louis Eugene Daily, Naval Research Laboratory, Anacostia Station, D. C.
Herman E. Hilleboe, United States Public Health Service, Bethesda, Md.

The following applicants for membership will be voted on at the business session, April 12, 1944:

For Active Membership

Ben David Chinn, Rush Medical College—1940
Dorothy Evelyn Donley, Vanderbilt University—1930
Dorothy Behner Holmes, University of Pennsylvania—1941
Shirley Pearlman Leva, George Washington University—1943
Lawrence Elias Putnam, Harvard Medical School—1934
Joseph Thomas Roberts, Tulane University of Louisiana—1936
Mark Perry Schultz, Western Reserve University—1926
Alfred John Suraci, George Washington University—1936

For Associate Membership

Alice H. Kiessling, George Washington University—1929
Eugene A. Patovillet, Georgetown University—1943

The following applicants for membership will be voted on at the business meeting, May 3, 1944:

For Active Membership

William Joseph Evans, Georgetown University—1938
John Louis Parks, University of Wisconsin—1934
Clarence L. Purdy, College of Medical Evangelists—1941

For Associate Membership

Bernard I. Dietz, D.D.S., Georgetown University—1917
Arturo B. Rotor, University of the Philippines—1933

On The Home Front

The American Congress of Physical Therapy, Eastern Section, will meet in Washington, April 8, to consider "Physical Therapy's Contribution to the Care of War Casualties." The morning session will convene at the Naval Hospital, Bethesda, Md., and the afternoon and evening sessions, at Walter Reed Hospital. **Dr. G. J. P. Barger,** Secretary of the Eastern Section, is making local arrangements for the meeting.

Among the participants in the program is **Dr. Addison M. Duval,** on the staff of St. Elizabeths Hospital, who will discuss "Physical Therapy in the Psychiatry Aspect of War Casualties" at the afternoon session.

The American Physicians' Art Association will hold its seventh annual exhibit during the A. M. A. convention at the Stevens Hotel, Chicago, June 12 to 16. The art to be exhibited includes personal work of the following types: oil portraits, oil still life, landscapes, sculpture, water color, pastels, etchings, photography, wood carving, leather tooling, ceramics and tapestries (needle work). Entry blanks and complete instructions may be secured from Dr. Francis H. Redewill, Secretary, A.P.A.A., Flood Building, San Francisco. There will be about 100 trophies, including medals and plaques.

The Washington Ophthalmological Society met March 6 in the Medical Society's building. Dr. Ramon Castroviejo of New York City, the guest speaker, chose for his subject, "Keratectomies and Conjunctival Plastics." Dr. H. C. McKnew gave a case report on Coats' Disease. Case presentations were made by Drs. Bernard J. Gurwin, Thomas R. Rees, Ernest Sheppard and Inez E. Wilber.

The Section on Neurology and Psychiatry held its meeting, February 17, at Hitchcock Hall, Saint Elizabeths Hospital. The program was presented by several members of the clinical staff of the Hospital: Drs. John E. Lind, Zigmond M. Lebensohn, Addison M. Duval, Alfred K. Bauer and Harold Stevens.

The following program was presented at the Section's meeting, March 16, in the Society's building: "Ruptured Intracranial Aneurysms," Dr. Walter Freeman and Dr. Ramon Alcerro Castro; "The Physiological and Psychiatric Approach to the Study of Sensation," Dr. David McK. Rioch.

The Clinico-Pathological Society met March 7 at the home of Dr. Matthew White Perry. Colonel B. N. Carter, M.C., U.S.A., was the guest speaker.

The Nominating Committee, which the Society elected by ballot to select nominees for the Society's offices for next year, consisted of the following members: Dr. Lewis C. Ecker, *Chairman*, Drs. Harry F. Anderson, J. Lloyd Collins, Preston A. McLendon, Paul S. Putzki, Frederick C. Schreiber and Wallace M. Yater. The nominees selected by the Committee were presented to the Society at its business meeting, March 1, and are listed on page 125 of this issue.

The Executive Committee of the Southern Medical Association will meet in St. Louis, April 4, to make plans for the forthcoming convention. Dr. Oscar B. Hunter, Chairman of the Committee, will attend the meeting together with the other two members, Dr. Curtice Rosser of Dallas, Texas, and Dr. Neil S. Moore, of St. Louis, Mo., and two members ex officio, Dr. W. T. Wootton, President of the Southern Medical Association, and Dr. Edgar G. Ballenger, President-elect. Three past officers have been invited to attend, namely, Dr. M. Pinson Neal, Past President; Dr. Lucien A. LeDoux, Immediate Past Chairman of the Executive Committee; and Dr. E. L. Henderson, next Immediate Past Chairman of the Executive Committee. Members of the Committee will be hosts at dinner to officers of the St. Louis Medical Society, April 4, after which they will attend the regular meeting of the Society.

More Federal regulations: Attention has been called to the fact that physicians could be of considerable assistance to retail pharmacists and patients if they would bear in mind the following regulations when recommending treatment:

1. Under the Pure Food and Drug Act, which was passed several years ago, no one can sell a pessary of any kind or rectal dilators of any kind to any layman unless the purchaser presents a written prescription from his physician.

2. The following regulations have been issued by the War Production Board in an effort to conserve strategic and scarce materials:

(a) Ethyl Rubbing Alcohol can only be sold to laymen upon the presentation of a physician's prescription stating the quantities the physician wants his patient to receive. Ethyl Rubbing Alcohol is put up in pint bottles only and the physician must state the number of pints required.

(b) Dietetic scales, baby scales and certain other weighing scales for use in the home can only be sold to a layman upon the presentation of a physician's prescription..

(c) Surgeon's rubber gloves can only be sold to a layman upon the presentation of a prescription by a physician.

The District of Columbia Society for Crippled Children opened a new consultation clinic for children suffering from cerebral palsy at its headquarters, 1220 New Hampshire Avenue, N.W. The clinic, which will be under the direct supervision of Dr. Winthrop Morgan Phelps, Medical Director of the Children's Rehabilitation Institute in Baltimore and counselor on cerebral palsy for the National Society for Crippled Children, will be open one day a month from 10 a.m. to 4 p.m. The clinic will have facilities for about 25 consultations at each monthly session. The service will be free of charge, with funds to finance the work provided by the Society's annual Easter Seal sale.

Dr. Phelps was formerly Professor of Orthopedic Surgery at Yale University. He has established clinics in nine states and is now Medical Director of the state cerebral palsy program of the New Jersey Crippled Children's Commission.

A number of physicians attended the opening of the clinic, among them Dr. Fred R. Sanderson, President of the Medical Society of the District of Columbia; Dr. A. L. VanHorn, Director of the Crippled Children's Unit of the Children's Bureau; Dr. Ella Oppenheimer, Director of the Handicapped Children's Unit at Gallinger Hospital; Dr. Robert C. Rush, of Children's Hospital; and Dr. Robert B. Hightower, of Gallinger Hospital.

Effective immediately, members subscribing to benefits under **Group Hospitalization, Inc.**, are entitled to hospital privileges in the new Suburban Hospital in Bethesda, Md. This announcement will be of particular interest to those subscribers who reside in the Bethesda-Chevy Chase area.

On March 1, 1944, when the books of Group Hospitalization were closed for new members of the Doctors' Group, the total number participating was 398.

Dr. Wm. Calhoun Stirling, Chairman of the Professional Division for the Fourth War Loan Drive, announced that a total of $753,177.00 had been subscribed by his Division during the Drive, which began January 18 and concluded on February 29. The results were gratifyingly above the quota of $750,000.00. The proceeds will be used to buy an ambulance plane, an equipped hospital train, and a 1000-bed hospital.

At the Medical Society's meeting, February 23, Dr. Stirling was presented with a citation from the United States Treasury Department in recognition of his services by Mr. John A. Reilly, Chairman of the District War Finance Committee.

Regional chairmen for the doctors' drive were Dr. A. Magruder MacDonald, Northeast Section; Dr. Charles Stanley White, Medical Buildings; Dr. Charles X. Suraci, Southeast and Southwest Sections; and Drs. Joseph J. McCarthy and Herbert E. Martyn, Northwest Section. Assisting in the sale of bonds at the booth in the Society's Building were a number of members of the Woman's Auxiliary to the Medical Society under the captaincy of Mrs. Joseph L. Gilbert and members of the Woman's Auxiliary to the Dental Society under the captaincy of Mrs. Allan Scott Wolfe. Mrs. Edgar M. McPeak, of the Women's Division of the War Savings Staff of the District of Columbia, assisted in the organization of the Drive.

Society members who are purchasing bonds each month are urged to do so through the Medical Society, where facilities will be made available for the sale of bonds. Bonds secured elsewhere should be reported to the Medical Society's office so that the Society will be given credit for these purchases.

Lt. Harvey Franklin Kreuzburg, who is serving as a Naval medical officer in the Pacific theater, has been awarded the Silver Star for gallantry during an air attack on his destroyer. He has also been awarded the Purple Heart.

The action for which he was honored occurred on August 21, 1943, when enemy planes attacked his vessel. According to the citation, "Lieutenant Kreuzburg, although wounded seriously in the arm, worked continuously and diligently among the wounded until forced by loss of blood to assume an advisory capacity. His prompt treatment of the wounded, with complete disregard for his own personal safety, undoubtedly saved the lives of several men and was in keeping with the highest traditions of the United States Naval Service."

Lt. Kreuzburg entered service in March, 1942. He is an alumnus of Georgetown University School of Medicine, a member of the graduating class of 1937.

Dr. Edgar A. Bocock has been appointed Director of Doctors Hospital, succeeding Mr. John A. Lindner. He took over his new duties March 4. Dr. Bocock has had many years of experience in hospital work not only in this country but in France and Panama. Among his assignments in the United States have been the following: Hospital Inspector at Walter Reed Hospital, with the rank of Major, from 1925 to 1927; Superintendent of Colorado General and Psychopathic Hospital, affiliated with the University of Colorado, from 1925 to 1927; and Superintendent of Gallinger Municipal Hospital from 1927 to 1943.

Honorary Membership in the Medical Society of the District of Columbia was conferred upon **Major General Norman T. Kirk,** Surgeon General of the United States Army, at the business meeting of the Society, March 1. General Kirk's election to membership was proposed by the Executive Board and the Board of Censors.

Dr. George A. Resta has been accepted into Fellowship in the American College of Surgeons. His name was omitted from the list of initiates published in the January 1944 issue of the ANNALS.

Health aspects of the Wagner-Murray-Dingell bill was the subject for discussion by the **Business and Professional Women's Club of Washington** at its meeting, March 1. Senator James F. Murray, one of the co-writers of the bill, spoke in its behalf, while Representative Winifred G. Stanley of New York and Dr. Henry C. Macatee, Chairman of the Medical Society's Committee on Public Policy, presented aspects of the bill which would be detrimental to public health and to the interests of the medical profession.

Dr. Agnes McNutt presided during the discussion. She was assisted in arranging the program by Dr. Carolyn Pincock, Vice Chairman of the Health Committee, and by Mrs. Mary J. Burke, R.N. Among the guests present at the meeting were Mr. A. J. Altmeyer, Chairman of the Social Security Board; Dr. Martha M. Eliot, of the Children's Bureau; Dr. Ella Oppenheimer, of the District Health Department; and Dr. Elizabeth Kittredge, Editor of *Women in Medicine.*

Dr. Winfred Overholser addressed the Harvard Club at a luncheon, February 12, at the Annapolis Hotel.

Theodore Wiprud addressed the Honor Society of Howard University, composed of selected junior and senior students of the School of Medicine, together with members of the Medico-Chirurgical Society, Inc., at a joint meeting, February 24. His subject was "The Physician in Modern Society."

Dr. Frieda Fromm-Reichmann presented a paper on schizophrenia before the Neuropsychiatric Section of the Baltimore City Medical Society at Johns Hopkins University, March 9.

Dr. George Baehr, who has served for two and a half years as Chief Medical Officer of the U. S. Office of Civilian Defense, retired on March 1. He was succeeded by **Dr. W. Palmer Dearing,** who has been Assistant Chief Medical Officer since the establishment of the Medical Division of the Office of Civilian Defense. In recognition of his services to the hospitals of the country in time of war, the American Hospital Association at its recent annual meeting voted to confer a special citation upon Dr. Baehr and elected him to honorary membership.

Dr. William R. Moses, a graduate of George Washington University School of Medicine in 1939, was appointed temporary Senior Intern at Gallinger Hospital, February 7, which post he will hold until May 21, when he can be legally appointed Chief Medical Officer in Surgery. He will succeed **Dr. J. Ross Veal,** who resigned the office recently to enter private practice. Dr. Moses has served four and a half years with hospitals in Baltimore.

The Winthrop Chemical Company has established through the **American Foundation for Tropical Medicine** the **Richard Pearson Strong Medal** of palladium metal and honorarium of $500 to be awarded periodically for outstanding service in the field of tropical medicine. The first medal and honorarium were presented February 28 to the honoree, Colonel Richard P. Strong, M.C., U.S.A., who is Director of Tropical Medicine at the Army Medical School and formerly Professor of Tropical Medicine at Harvard Medical School. Rear Admiral E. R. Stitt (retired), former Surgeon General of the U. S. Navy, made the presentation in behalf of the Foundation.

BOOK REVIEW

"The Health of Children in Occupied Europe." International Labour Office, Montreal. Pp. 36. Price, 25 cents. November, 1943.

After careful study of the facts and figures presented in this booklet, one comes to a number of disturbing conclusions. Not only are most of the children in occupied Europe being deprived of the caloric requirements of a normal diet, but they are not receiving certain vital foods. For instance, in Norway, cod liver oil, meat, bacon and eggs have practically disappeared. In the other countries, too, carbohydrates of deteriorated quality are the only substitutes for much needed proteins and fats. While the legal rations are adjusted to age, as shown in supplemental charts, there has been a constant scaling down in the amounts allowed. As long as the war continues further reductions in vital foods and other necessities are bound to take place. Besides the suffering from lack of food, there has been untold hardship caused by the shortage of fuel and clothing, and lack of transportation. Coal is strictly limited everywhere; shoes and woolen goods cannot be obtained; and poor quality soap is doled out in small quantities.

Conditions are better in Germany. The scale of rations there provides adequately for all classes, especially the rising generation and the workers. At the expense of the occupied countries every effort is made to maintain a good standard of living. Even Germans living in occupied countries fare very well, as they have priority for all purchases and are allowed the same amount of rations to which they would be entitled in Germany.

The consequences of the deprivation in occupied countries are very serious. Besides general malnutrition and undernourishment, statistics show serious loss of weight and significant retardation of growth among children. Lowered resistance to disease is evidenced by the increase in cases of edema, rickets, anemia, scurvy and skin diseases. Tuberculosis, including the acute bilateral pulmonary form with rapid evolution, is running rampant. Malaria, diphtheria, typhus, typhoid fever, dysentery, infantile diarrhea, meningitis, poliomyelitis and scarlet fever have spread alarmingly. The infantile death rate has increased enormously, and there is still an excess of deaths over births.

Education and morals have been dealt a terrible blow by the war. Lack of warm clothes and footwear have obliged many children to miss school, and undernourishment has caused the deterioration of mental powers. Bad living conditions have had a very demoralizing effect upon the young. Juvenile delinquency has increased. The main charges have been theft (especially of food and necessities), begging and absence from school, offenses clearly related to conditions imposed by the war.

Some neutral and even Allied private agencies have been able to carry on a little of the most urgent type of relief work, but this does not begin to meet the needs. One of the first great tasks facing the United Nations once victory has been won will be the feeding of Europe, the checking of epidemics, and the restoration of public health. Machinery for this work has been set up under the leadership of the United States, with Mr. Herbert H. Lehman as Director. The organization will be known as the United Nations Relief and Rehabilitation Administration. Thus the extent of the improvement in living conditions in European countries after the war will depend largely on international collaboration.

M. B. Y.

FRANK WHEELER BRADEN, M.D.

(1871–1944)

Dr. Frank Wheeler Braden, a Life Member of the Medical Society of the District of Columbia, died suddenly February 19, 1944, at his residence, 628 East Capitol Street.

Dr. Braden was born in Elmira, New York, May 20, 1871, and came to the District of Columbia in 1887. He graduated from Georgetown University School of Medicine in 1895 and served his internship at Garfield Memorial Hospital. With the exception of two years on the West Coast, he practiced in Washington during his entire lifetime. For many years he was examining physician and surgeon for the Standard Oil Company and police surgeon for the District of Columbia. He also had served as examining physician for the Panama Canal Commission.

Dr. Braden was elected to membership in the Medical Association of the District of Columbia in 1897, his Life Membership in the Medical Society extending from January 1, 1938. He was also a Fellow of the American Medical Association and a member of the Washington Medical and Surgical Society.

Dr. Braden was a charter member of the Ingraham Memorial Congregational Church and a member of the LaFayette Lodge, F.A.M., and the Almas Temple Shrine.

Surviving are his wife, Mrs. Julie B. Braden; a daughter, Mrs. Hulda Keyser of Northumberland, Pa.; a sister, Miss Caroline Braden, and a brother, Bertram Braden, both of Washington, and three grandchildren.

DANIEL THOMAS BIRTWELL, M.D.

(1874–1944)

Dr. Daniel Thomas Birtwell, an Active Member of the Medical Society of the District of Columbia, died February 4, 1944, at Emergency Hospital. He had been in ill health for many years.

Dr. Birtwell was born in Chester, Pa., May 24, 1874. He graduated in medicine from Columbian University (now George Washington University) in 1900, and was licensed to practice in the District of Columbia in 1905. During the five years immediately following his graduation he was situated in Clarksburg, West Virginia.

Dr. Birtwell was a member of the American Medical Association, affiliating himself with the Medical Society in 1907.

Surviving are his wife, Mrs. Nellie L. Birtwell; a son, Comdr. Daniel T. Birtwell, Jr., U.S.N.; and two sisters, Miss Margaret H. Birtwell of Chester, Pa., and Miss Edith Birtwell of Easton, Pa.

SAMUEL LOUIS HILTON, Phar.D.

(1866–1944)

Dr. Samuel Louis Hilton, nationally known pharmacist, died January 30, 1944, at his home, 2152 L Street, N.W., following an illness of three months.

Dr. Hilton was a native Washingtonian, born March 18, 1866. He spent his entire life in this community, operating his own pharmacy at 1033 22nd Street, N.W. since 1889, the year following his graduation from the National College of Pharmacy (now a part of George Washington University). From 1887 to 1892 he was Assistant Professor of Analytical Chemistry of the National College of Pharmacy, also serving as a member of the Board of Trustees of the College from 1889 to 1914.

In 1935 the New York Branch of the American Pharmaceutical Association together with local pharmaceutical associations, the faculty of George Washington University School of Pharmacy, and the District of Columbia Board of Pharmacy gave a testimonial dinner to Dr. Hilton, on which occasion he was presented the Remington Medal, which is the highest honor which the pharmaceutical profession confers annually to some member in recognition of outstanding work. He received the Alumni Achievement Award from George Washington University in 1941. Dr. Hilton is also credited with inaugurating the movement which resulted in the establishment of the American Institute of Pharmacy in Washington.

Dr. Hilton had held the highest office, that of president, in many pharmaceutical organizations, including the D. C. Retail Druggists' Association, the D. C. Veteran Druggists' Association, and the American Pharmaceutical Association. He was

Secretary of the District Board of Pharmacy for eight years, a member of the U. S. Pharmacopoeial Convention since 1900, and a member of the National Formulary Committee since 1890. He became an Associate Member of the Medical Society of the District of Columbia in 1917.

Surviving are two stepdaughters, Mrs. Maxwell Poerstel of Bethesda, Md., and Mrs. William H. O'Brien of Miami, Florida, and a stepson, Charles L. Williams of Washington. His wife, Mrs. Virginia L. Hilton, died last November.

JOHN EDWARD LIND, M.D.

(1888–1944)

Dr. John Edward Lind, well known psychiatrist, died February 21, 1944. He had been a member of the staff of Saint Elizabeths Hospital for 31 years, and also served on the staff of George Washington University School of Medicine as Clinical Professor of Psychiatry.

Dr. Lind, a native Washingtonian, was born April 7, 1888. He was a descendant, on his mother's side, of Nancy Hanks, mother of Abraham Lincoln, and, on his father's side, of Sir James Lind, prominent British physician and writer.

He received his degree in medicine from George Washington University School of Medicine in 1909, and joined the staff of St. Elizabeths Hospital in 1913, holding the title of Senior Medical Officer at the time of his death. He was well known as a writer and lecturer in the field of psychiatry and had testified as a medical witness in a great many criminal cases during the last quarter of a century.

Dr. Lind was elected to Active Membership in the Medical Society of the District of Columbia in 1917 but retained his Active status for only a few years. In 1939 he reapplied and was elected as an Associate Member. He also held membership in the American Psychiatric Association and the Washington Society for Nervous and Mental Diseases. He was a diplomate of the American Board of Psychiatry and Neurology.

Miss Marie Seewald, of Williamsport, Pa., whom Dr. Lind married on December 18, 1912, died in 1937. Three of their four children survive: Mrs. Robert E. Dudley of Arlington, Va.; John J. Lind and William A. Lind, both serving in the U. S. Army. He is also survived by two sisters, Miss Grance Lind and Miss Ida Lind, of Washington. Dr. Lind's home was on the grounds of the Hospital.

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(*Continued from page 111*)

Summary

A brief resumé of the procedure used in making an immediate etiologic diagnosis in patients with meningeal irritation is given. In purulent meningitis an exact diagnosis can and must be made in a very large percentage of patients within an hour or two after the initial lumbar puncture.

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George Calver, M.C., U.S.N., and Theodore Wiprud, Secretary of the Medical Society, are ex officio members. The Woman's Auxiliary to the Society has appointed the following representatives to coöperate with the Committee: Mrs. Fred R. Sanderson, President, Mrs. A. Magruder MacDonald and Mrs. Leon M.Martel.

Detailed plans for ARMY-NAVY NIGHT will be announced in the very near future.

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Pats on the Back

Editors of the MEDICAL ANNALS are justifiably pleased with the reception of their journal in its new dress. The January issue had no sooner been delivered to readers than congratulatory messages were received.

A physician in the U. S. Public Health Service took time out on a busy day to tell your Observer of his high regard for MEDICAL ANNALS and its fine appearance.

Mr. Mac F. Cahal, formerly Secretary of the American College of Radiology and now Executive Officer and General Manager of the Southwestern Medical Foundation in Dallas, Texas, writes:

> "Congratulations on the new cover of 'Medical Annals.' It is the finest improvement I have seen in any medical journal, and makes yours, from a physical standpoint at least, the most attractive in the country."

Mr. H. L. Sandberg, Director of the Coöperative Medical Advertising Bureau of the American Medical Association, also has a good word for us. He comments:

> "I wish to congratulate you on the fine appearance of your January issue. In addition to a fine cover, it has many interesting and timely articles."

Such pats on the back are rays of sunshine in every editor's existence.

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *April, 1944* NUMBER 4

WEIL'S DISEASE IN THE DISTRICT OF COLUMBIA

Report of Four Cases

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A SINGLE case of Weil's disease was reported in the District of Columbia by Towler and Walker[1] in 1927, in the person of a man in a meat market who became ill in November, 1926. He eventually recovered. No other cases have been described in Washington since then, although evidence of the presence of a reservoir of infection has been found. In order to correct the view that Weil's disease is a rare condition in Washington, D. C., we wish to present data concerning cases of leptospirosis recently observed in this city.

Leptospirosis in the United States is caused by two species of organisms, *Leptospira icterohaemorrhagiae* and *Leptospira canicola*. The latter is found in dogs while the former infects both rodents and dogs. They are distinguishable bacteriologically by serologic tests and by their relative pathogenicity for certain animals. Weil's disease, which is caused by *L. icterohaemorrhagiae,* is frequently associated with the presence of jaundice, whereas canicola fever caused by *L. canicola* is only rarely associated with this sign. Other species of leptospirae are known to produce human disease in certain areas of the world.

The original case of Weil's disease observed in this country was discovered by Stimson.[2] He noted an organism which he termed *Spirochaeta interrogans* in the kidney of a man who died during an outbreak of yellow fever in New Orleans in 1905. The significance of the findings was not understood, and it was not until 1922 that Wadsworth et al[3] reported the first recognized case in this country. Cases were reported infrequently thereafter and by 1941 there had been recorded 27 proved and 20 presumptive cases in this country. Larson[4] added 51 cases to this group. These included 33 based upon adequate clinical and laboratory data, a group of 6 anicteric and inapparent cases presenting positive serology, and 7 others diagnosed upon laboratory findings. Since then a large number of cases have been reported, and there is serologic evidence concerning at least 200 cases which have come to the attention of one of us (Larson) during the last 4 years. Among 12 cases from the District of Columbia, 2 were caused by *L. canicola* and the remainder by *L. icterohaemorrhagiae.** Two deaths occurred in the latter group.

EPIDEMIOLOGY

The condition in this country is usually associated with an occupational history of contact with dogs or rats or materials soiled with their excreta. Coal miners, sewer workers, slaughter-house employees, cooks, waiters, fish cleaners, poultry pickers, and others engaged in similar occupations have been infected. Cases have been identified in farmers, persons who picked up rats, persons who have handled dogs, and swimmers who have bathed in polluted water. It is apparent that the observations made by Stiles and his co-workers[5] regarding the occupational hazard of Weil's disease are of importance. In Holland[6] it is stated that most cases result from either accidental or intentional immersion in polluted waters.

In a recent survey to ascertain the prevalence of infection with *L. icterohaemorrhagiae* among wild Norway rats (*Rattus norvegicus*) in the District of Columbia[7] it was shown that about 48 per cent of the rats examined were infected with this organism. The incidence of infection was about 4 times as great among rats over 20 cm. in length as in those of smaller size. Among 18 dogs examined at the city pound, 10 or 55.5 per cent exhibited agglutinins against either *L. icterohaemorrhagiae* or *L. canicola.* Five dogs had been infected with each organism. Thus a considerable reservoir of infection apparently exists in the District among both rats and dogs and is effective for both species of parasites.

The spotty distribution of reported cases of Weil's disease probably indicates the failure of recognition of the disease by clinicians. In our experience it is a matter of individual knowledge which tends to determine the incidence of Weil's disease rather than the actual occurrence of recognizable cases of leptospirosis. With relatively large and widely scattered reservoirs of infection in nature and with adequate contact established between infective hosts and man it would appear that there should be many more recognized cases than are actually reported.

LABORATORY METHODS

There are a number of methods for the laboratory diagnosis of Weil's disease. These include serologic tests, cultivation of the organism on artificial media, and the isolation of leptospirae by inoculation of blood, urine or tissue into susceptible animals. The serologic tests include the agglutination-lysis test, the adhesion phenomenon, and the mouse protection test. The latter is too bulky and slow to be of value in clinical practice but is of value in the interpretation of low agglutination titers and for epidemiologic purposes. By far the most satisfactory test available is the agglutination-lysis test of Schuffner and Mochtar. Positive reactions may be obtained as early as the eighth day of illness and may be retained for periods as long as 19 years. It is not unusual to obtain titers of 1:1,000,000 with serums drawn at the height of the antibody reaction. Titers of 1:100 or above are probably of diagnostic significance. The test must be carried out under well controlled conditions, and because of the technical difficulties associated with its performance great care should be taken in doing the tests and in interpreting the results obtained. Cross reactions between the two types of organisms are usually observed, but the difference in the relative titer noted will indicate which organism is responsible for infection.

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* A case of canicola fever was reported in the ANNALS by Tievsky and Schaefer, January, 1944.

Leptospirae may be cultivated on a variety of media. The essential needs of the organism seem to be fulfilled by a media having a pH of about 7.2, containing an adequate amount of serum, and being fluid or semifluid in nature. Growth has been maintained on tap water, physiologic salt solution, and Ringer's solution when these fluids have been adjusted to the proper pH and mixed with 5 to 10 per cent rabbit serum. Verwoort's medium has been generally recommended for cultivation of leptospirae. Blood cultures are of value only during the first few days of illness and once jaundice has developed are of relatively little value. After the onset of icterus organisms may be cultivated from the urine provided the sample to be studied is fresh, has been obtained aseptically, and has been adjusted to a pH of about 7.2. In fatal cases leptospirae may usually be obtained from the kidneys.

Attempts to obtain leptospirae by inoculation of susceptible animals should make use of the same supposedly infective material as was recommended for cultural studies. Animals of choice include guinea pigs, young white mice, deer mice, and hamsters.

Examination of blood and urine by dark-field illumination is often misleading, and in the absence of other laboratory evidence will not substantiate a diagnosis of Weil's disease.

Clinical Features

The clinical course of Weil's disease may be divided into three phases. The first or septicemic phase is characterized by fever, presence of leptospirae in the blood, and the absence of circulating antibodies. The second or toxic phase is manifested by jaundice, disappearance of organisms from the blood and their appearance in the urine, and the development of circulating antibodies. In the final or convalescent stage the serologic reaction reaches its height and the clinical symptoms decline.

The incubation period averages about 9 days but may vary from 4 to 14 days. The onset is sudden with nausea, vomiting, chills, fever, prostration and severe headache. Severe muscular pains, especially in the legs but also in the chest and abdomen, are outstanding. Stress should be laid on the occurrence of conjunctival injection which is held to be a valuable diagnostic sign especially by Dutch workers who have had opportunity to become familiar with this condition. In many cases cough with production of tenacious white sputum is observed, and sore throat is a frequent feature. The leukocyte count is usually increased and may be as high as 40,000 cells per cu. mm., and the polymorphonuclear cells may constitute as high as 80 to 94 per cent of the total number of cells. The septicemic phase may last from 2 to 10 days and in about 90 per cent of cases is ended by the sixth or seventh day of illness. The toxic phase is then ushered in.

Jaundice occurs during the second stage of illness at about the time fever disappears. The icterus index rises rapidly and may approach 300 units but is usually about 100 units. In about 50 to 60 per cent of cases jaundice may not occur and the clinical diagnosis of Weil's disease be overlooked. Renal damage occurs as shown by the presence of red and white blood cells, casts, and albumin in the urine as well as by an increasing azotemia. The nonprotein-nitrogen content of the blood may increase to very high levels. Hemorrhages into the skin and organs occur in severe cases. Hepatomegaly is frequently noted, but splenomegaly is rare. About a third of the cases are found to have a generalized lymphadenopathy. Oliguria or anuria are characteristic of this stage of the disease.

At about the end of the second week of illness, the stage of convalescence is reached. Jaundice subsides, the blood nitrogen level decreases, and urinary excretion increases. In most cases the patients go on to eventual recovery; a few relapse. Some may develop iritis, iridocyclitis, leptospiral meningitis, or endocarditis.

Prognosis depends upon a number of factors. Age of the patient is important as those in the older age groups contribute a greater proportion of deaths than do those in the younger age groups. The presence of hemorrhages is an unfavorable sign. The mortality rate in anicteric cases is very low, but in icteric cases it may be over 30 per cent.

Diagnosis depends to a large extent upon consideration of the disease by the clinician. Patients with a febrile illness resembling severe influenza but in whom abnormal pulmonary signs are elicited and who have a moderate or severe leukocytosis together with an occupational history or association with rats, dogs, or materials possibly soiled with their excreta should be considered as possibly suffering from Weil's disease and measures should be instituted to verify the diagnosis. An increasing or high agglutination titer against the specific organisms or the isolation of leptospirae establishes the diagnosis. It should be pointed out that jaundice in the absence of fever is the usual finding, since fever is usually terminated before icterus develops. Konar, Roy and De[8] include influenza, infectious hepatitis, secondary syphilis, septicemia, malaria, blackwater fever, dengue, typhus fever, and yellow fever in the differential diagnosis.

Treatment is largely symptomatic, although evidence and opinion indicate that the use of specific immune or convalescent serum administered early in the course of the disease reduces the length of illness and decreases mortality. The following cases illustrate the various clinical courses this disease may follow.

REPORT OF CASES

Case 1.—L. M., a colored man, aged 22, a poultry dresser, was admitted to Gallinger Municipal Hospital, July 8, 1942. He complained of malaise, weakness, and yellow sclerae. The onset was sudden on June 25, 1942. 2 weeks prior to admission, with chills, fever, sore throat, and general malaise. There was anorexia, nausea and vomiting. During the first few days the patient tried to work but was unable to do so. He was told that his eyes were yellow, and he noted that his urine had become brownish-yellow and his stools light-colored. He had received antiluetic therapy in 1936. The remainder of his past and family history was irrelevant. The physical examination revealed a well developed, well nourished, afebrile, colored male who was not acutely ill. A generalized lymphadenopathy was present. Except for icteric sclerae the head and neck were normal, as were the chest and abdomen.

The hemoglobin (Sahli) was 88 per cent; the red blood count was 3,740,000 cells per cu. mm.; and the white blood cells numbered 11,000 cells per cu. mm. with 77 per cent polymorphonuclears. The Kahn test was negative. There were no sickle cells in the incubated blood smear. Urinalysis was normal except for the presence of urobilin in increased amounts. Repeated urinalyses continued to show urobilin in moderate amounts. The icterus index was 90. Blood proteins, cholesterol, and cholesterol esters were normal. Agglutination tests for Weil's disease performed July 29, 1942, revealed a positive agglutination in a dilution of 1:1,000,000 for *L. icterohaemorrhagiae*. The course in the hospital was uneventful, the icterus and symptoms gradually disappearing. He was discharged on August 1, 1942, 23 days after admission, fully recovered.

Case 2.—R. L. B., a white man, aged 49, a deck-hand, was admitted to Gallinger Municipal Hospital on July 21, 1942, complaining of pain in the abdomen and jaundice. On July 15, 6 days before admission, the patient fell from a pier 5 feet high, struck his abdomen and head on a log, and lost consciousness. He was unable to give an accurate story of what had happened between the accident and the time of admission. Dull continuous abdominal pain was generalized over the upper half of the abdomen and radiated to both lumbar regions. Fluid and food were not retained because of persistent nausea and vomiting. There were diarrheal stools that became blood-tinged 2 days before admission. In addition he complained of headache, weakness, malaise, and chilly sensations. There was no history of previous jaundice or hemorrhagic tendencies. He stated that he had been a heavy drinker since 19 years of age.

The physical examination showed a well developed, well nourished white male, markedly icteric and confused. He did not appear acutely ill. The temperature was 100.4°F., the pulse rate 86, the respiratory rate 16, and the blood pressure 105/70. Numerous purpuric spots were noted over the entire body, especially over the back and forearms. These varied in size and shape, and did not blanch on pressure. Conjunctival congestion and hemorrhages were noted. The chest, lungs and heart were entirely negative. The abdomen was moderately distended. A prominent venous pattern over the lower quadrant with voluntary muscle splinting was present. The tenderness extended over an area corresponding to the enlarged palpable liver. The free edge of the liver was 4 cm. below the right costal margin. The spleen was not palpable. Rectal examination was negative. There was slight bilateral costovertebral tenderness. The red blood cell count was 2,590,000 cells per cu. mm.; the hemoglobin (Sahli) was 69 per cent; and the white blood cells numbered 13,000 cells per cu. mm. The hematocrit was 36, with a color index of 1.3. The bleeding time was 3 minutes and the coagulation time 3.5 minutes. Repeated urinalyses revealed 2 plus to 4 plus albumin. Hyaline and granular casts and occasional white and red blood cells were reported. The Van den Bergh reaction gave an immediate direct reaction with a blood bilirubin of 15 mg. per cent. The nonprotein nitrogen was 129 mg. per cent. X-ray examination of the chest on admission revealed no pulmonary or cardiac pathology; a flat plate of the abdomen was normal. The course was rapidly downhill. On the second day after admission the patient developed nuchal rigidity, fever, and pulmonary congestion. An X-ray of the chest revealed diffuse mottling throughout all lobes, interpreted as bronchopneumonia. Repeated spinal taps showed blood-tinged spinal fluid with no increase in spinal fluid pressure. On the third day of hospitalization a type 13 pneumococcus was isolated from the sputum, and the patient received 200,000 units of 13 antipneumococcal serum with no appreciable improvement. The temperature continued to rise; the icterus deepened and was accompanied by a rising azotemia and oliguria which ultimately developed into anuria. The patient became more confused and irrational and died on July 27, 1942, 6 days after admission.

Agglutination studies were not obtained on this patient. At necropsy, however, definite evidence of Weil's disease was noted. Leptospirae were identified in the kidney by means of Levaditi-stained sections.

Case 3.—E. Y., a colored man, aged 30, laborer in a poultry house, was admitted to Gallinger Municipal Hospital, August 23, 1942 in a semi-stuporous and disorientated state. He had a history of alcoholic indulgence for a period of 8 days prior to admission. Six days prior to admission he felt ill, began to have chills, fever, and generalized muscular aching associated with anorexia, nausea and vomiting, and constipation. Cramp-like pains in his legs were severe. The chills became more severe during the next 3 days, and the patient became delirious. On the day of admission jaundice of the sclerae was noted, but change in color of the urine or stools was not observed. There was no melena and no abdominal pain other than that associated with the generalized muscular pains. The past and family history was irrelevant, except that he was accustomed to periodic alcoholic sprees.

The physical examination revealed a well developed, well nourished colored man, disorientated and confused, drowsy, and appearing acutely and critically ill. The temperature was 100° F. There was jaundice of the sclerae, mucous membranes, and skin. The pupils were equal and regular but did not react to light, and the conjunctivae were injected. Dried blood was present in the nostrils. There was dullness in both lung bases posteriorly, with suppression of breath sounds but no râles. The heart was normal except for a questionable presystolic gallop. The abdomen was tense, with moderate tenderness in the right upper quadrant. The liver and spleen were not palpable. No masses or fluid were detected. Peristalsis was normal. The extremities were symmetrical and freely movable. A careful neurologic examination revealed marked nuchal rigidity and positive Kernig and Brudzinski signs.

The hemoglobin (Sahli) was 70 per cent; the red blood cell count was 3,090,000 cells per cu. mm., and the white blood cells numbered 14,950 cells per cu. mm., with 77 per cent polymorphonuclears. Urinalysis on admission revealed a 3 plus albumin, and bilirubin was present. These abnormal elements persisted for 3 days and then disappeared; subsequent urinalyses revealed only the presence of urobilin. The blood urea nitrogen was 94 mg. per cent, creatinine 4.5 mg., and icterus index 88. The result of the Van den Bergh test was immediate direct. The bilirubin blood concentration was 24 mg. per cent. Spinal fluid obtained on admission was icteric and contained 455 cells, 50 per cent of which were polymorphonuclear neutrophiles, 33 per cent lymphocytes and 17 per cent monocytes. No organisms were present, the sugar content was normal, and culture was negative. The initial spinal fluid pressure was 280 mm. of water. An X-ray film of the chest revealed bilateral pulmonary congestion, slight widening of the aorta, and enlargement of the heart to the right and left. Circulation and venous pressure readings were normal. Agglutination tests for *L. icterohaemorrhagiae* were positive in a titer of 1:1,000, and were negative for *L. canicola* on admission. A number of serologic tests were made, and the titer for the former eventually reached 1:1,000,000 and for the latter 1:10,000.

On the first hospital day the liver was noted to be palpable 1 fingerbreadth below the right costal margin. The pulmonary findings persisted. However, in view of normal venous pressure and circulation times, these findings were thought to be unrelated to the heart. The patient's condition remained essentially unchanged until the fifth hospital day. At this time the nuchal rigidity disappeared, the temperature returned to normal and the sensorium cleared. From this date until discharge the patient's course was one of gradual improvement. The icterus and azotemia gradually returned to normal.

A roentgenogram of the chest on the twelfth hospital day revealed marked clearing of the previously noted pulmonary congestion and return of the heart to normal size and configuration. On the same day the patient signed out of the hospital against advice.

Case 4.—L. R., a colored man, aged 34, a fish cleaner in a market, was admitted to the hospital, November 21, 1942, because of sore throat, fever, malaise and cough. The present illness began 2 weeks before and increased in severity. On November 20, 1942, the patient coughed blood-tinged sputum several times during the day. He denied ever having coughed blood-tinged sputum before and had been in good health in the past. He was treated for syphilis from 1936 to 1938. The family history was irrelevant.

Physical examination revealed a well developed, well nourished, colored male who hiccoughed throughout the examination. He appeared lethargic and weak. The temperature was 99.9° F., the pulse rate 96, the respiratory rate 20, and the blood pressure 124/70. The skin was dry and scaly and showed numerous excoriations. Except for icteric sclerae and injected pharynx, the head and neck were normal. There was generalized lymphadenopathy. The chest was essentially negative. The abdomen was moderately distended; there was no tenderness or rigidity. The liver extended 3 fingerbreadths below the costal margin, was smooth in outline, and was not tender.

The hemoglobin (Sahli) was 73 per cent; the red blood cell count was 3,760,000 cells per cu. mm.; and the white blood cells numbered 13,000 cells per cu. mm. with a normal differential. Urinalysis on admission showed occasional white blood cells in the sediment, and bile was present. The blood urea nitrogen on admission was 45 mg. per cent and returned to normal before discharge. The Van den Bergh test gave an immediate direct reaction and a blood bilirubin concentration of 3.6 mg. per cent. The Schmidt test for bile and the guaiac test for blood in the stools were both positive on admission. Repeated examinations were negative. On November 25, 5 days after admission, there was a sudden rise in fever and an increase in icterus. Blood taken on November 8 agglutinated *L. icterohaemorrhagiae* in a titer of 1:100,000 and *L. canicola* in a titer of 1:1,000; a sample drawn on December 2 agglutinated these organisms in titers of 1:1,000,000 and 1:10,000, respectively.

The patient was discharged after 21 days fully recovered.

SUMMARY

Four cases of Weil's disease occurring in the District of Columbia have been reported in this paper. Three were diagnosed on the basis of serologic reactions and the fourth upon autopsy findings and demonstration of leptospirae in Levaditi-stained sections of the kidneys. All were clinically recognizable as Weil's disease. The interest in these cases revolves about the fact that they are the first to be observed and recognized in the area from 1926, when a single case was noted, to December 1943. Since it is improbable that no cases actually occurred during this period, failure to diagnose the disease is probably responsible for the apparent absence of leptospirosis in Washington. With utilization of present laboratory and clinical knowledge it should be possible to recognize the disease and establish its true incidence in the District of Columbia.

N. B. We wish to thank Dr. Malcolm M. Stanley for his coöperation in the study of these patients.

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SOME MEDICAL LESSONS OF THE MOBILIZATION[*]

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SUFFICIENT time has now passed and enough official data are available to indicate certain lessons that may be learned and trends that may be foreseen as a result of the mobilization for the present war.

The statistical data here presented have been secured largely from published and unpublished reports of the Office of the Surgeon General, United States Army. The writer of this paper is responsible for any interpretations or conclusions stated herein, unless otherwise indicated.

An early report of "Induction Board Experience" was published in *Army Medical Bulletin*, No. 65, January, 1943. Many of the facts stated below relating to Induction Board experiences up to September, 1942 were brought out in that report.

Induction into the Army under the Selective Service Act began in November, 1940. For the remainder of that year and during all of 1941 selectees were examined first by the Local Boards and by the Army Induction Boards. After about the middle of May, 1942 the Local Boards served only to screen out the most obvious defectives, such as hopeless invalids, cripples and the obviously insane. The complete examination since that date has been made by the Army Induction Boards. There was a transition period of a few months between these two methods. There seems to be no doubt that the present method is superior to the one originally set up. Concentration of the work for an entire district in one board lessens the number of examiners required, greatly reduces the amount of work of Review Boards, and makes the services of specialists available on every board. It has produced much greater uniformity in results, not only within local districts but throughout the entire nation, and has considerably reduced the percentage of rejections. The system has gradually improved in its operation as examiners have become more experienced, and as administrative faults have been eliminated. Changes made in the regulations from time to time have resulted in securing a larger percentage of selectees for the services. As the system operates at the present time it appears to be the ideal method for selecting men for the military services and it could readily be continued after the end of the war if selective service is adopted for a peacetime army.

I mentioned above certain changes in the regulations which were made from time to time and which had a material effect on the number of men selected for military service. One of these related to dental defects. Originally the standards required 3 pairs of opposing masticating and 3 pairs of opposing incisor teeth. This was changed so that registrants who fall below these standards can be accepted if they are well nourished, are of good musculature, are free of gross dental infections and have sufficient teeth, either natural or artificial, to subsist on the Army ration. This change made a considerable reduction in rejection rates.

Another change in regulations related to visual standards. Originally the regulations demanded at least 20/100 vision in each eye without glasses if correctible to 20/40 with glasses. This was changed to make the minimum requirement 20/200 in each eye, correctible to 20/40 with glasses. This change also caused a reduction in rejection rates.

Another change in regulations resulted in a marked and necessary increase in the number rejected for military service. This related to mental disease. In March, 1941 the Office of the Surgeon General of the Army sent out a circular urging Induction Boards to reject for Army service not only the obviously insane but also those who, because of other mental conditions, would not, in the opinion of the Board, make good soldiers. This resulted, as stated above, in a sharp rise in the percentage of men rejected for mental disease. The rate rose at one time to as high as 83 per thousand applicants, but by September, 1942 it dropped to between 60 and 70 per thousand and has stabilized at about an average of 60 per thousand. It will be realized that this is a very high rate of rejections for a single cause when it is recalled that such a common disease as pulmonary tuberculosis has a rejection rate of only about 11 per thousand.

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[*] Read at the Fifteenth Annual Scientific Assembly of the Society, October 2, 1943.

There is a plain warning here that mental disease is a real public health problem that must concern the medical profession and public health authorities, both now and in postwar years. For a number of years psychiatrists have been issuing warnings that mental disease is increasing in incidence. They have based their concern upon the increasing number of inmates of mental hospitals. Here in Induction Board experience, based for a large part upon examinations by trained psychiatrists, is further warning that the problem is even more serious than could be inferred from the number who actually reach mental hospitals. An interesting point brought out by the records of Induction Boards is that, in general, service areas having the largest metropolitan centers also tend to have the largest rejection rates for mental and neurologic diseases. The conclusion drawn by the Army interpreter of these statistics is not the obvious one, that mental disease is more common in the metropolitan areas, but that more trained psychiatrists were available there for the examinations and that for this reason the rates for mental rejections in metropolitan areas more nearly approximate the country-wide incidence of mental disease than do those reported from rural areas.

The problem of rehabilitation of individuals rejected for military service because of mental disease and also of those who are discharged from the services suffering with mental disease is one of large proportions.

Recently the state of New Jersey has instituted a plan of psychiatric screening which is state-wide under the direction of the Department of Institutions and Agencies and in coöperation with the Selective Service System. Through social and health counselors attached to the local draft boards data are being collected concerning the mental health and personality of each registrant. A rehabilitation program has been established with both public and private institutions coöperating. It is hoped that those treated can be restored to a useful place in industry and society through this rehabilitation program. The New Jersey plan, if carried out for the duration of the war, will provide much information and experience upon which may be based postwar plans for rehabilitation of those with mental and nervous diseases.

Pulmonary tuberculosis is another disease in which the experience of Induction Boards has furnished much that is valuable and interesting. It has been known for some years that at least 75 per cent of cases of early active pulmonary tuberculosis can be discovered only by X-ray examination. It was therefore decided by the Medical Departments of both the Army and the Navy that every applicant for the military service would have an X-ray examination of the chest. It required a few months following the beginning of the selective draft to smooth out differences of opinion as to methods and to secure the necessary apparatus, but both the Army and the Navy adopted methods for X-ray examination, and almost from the beginning of the present emergency every applicant for the service, both enlisted and commissioned, has had an X-ray examination of the chest. In the early months the results were characterized by a great lack of uniformity throughout the nation, and undoubtedly numerous errors were made both in admitting men to the services with active tuberculous lesions or unstable lesions that later became activated, and by excluding from the services some whose lesions were entirely healed. As technic improved and experience of those interpreting films increased, the results have become more uniform and mistakes in both directions less common. The fact that the percentage of rejections for this cause is only slightly above the percentage recognized for incidence of active pulmonary tuberculosis in the age group involved is evidence that the method is practical and effective. The latest available statistics, those for January, February and March, 1943, shows a rejection rate for pulmonary tuberculosis of 10.5 per thousand for white selectees and 13.4 for colored. It is noticeable that the rates for white and colored are not greatly different, although it is known that the death rate of pulmonary tuberculosis among colored people is almost three times that of white people. The induction board figures indicate that, although the incidence of pulmonary tuberculosis does not differ widely in the white and colored races, the negro either offers less resistance to the disease once it is contracted or because of socioeconomic conditions is less well prepared to put up a good fight against it.

The success of the methods adopted for X-ray examination of the chests of all applicants for the military service, both commissioned and enlisted, has served to strengthen the arguments which many have been making for X-ray examination of men and women entering the industries, and indeed of the high school and early college population of the entire nation. Since the early years of this century the mortality from pulmonary tuberculosis has been reduced from about 200,000 to about 50,000 annually. It is the opinion of those best informed that a further material reduction in the incidence of the disease and consequently of the mortality due to it can be brought about by mass X-ray examinations of adolescents and young adults, the group that is particularly susceptible to the disease.

While awaiting the gradual adoption of such mass surveys the nation should take advantage of the mass survey that is being conducted daily of the young manhood of our country. The Health Departments in a number of localities have recognized the importance of the X-ray examinations being carried out by Induction Boards as a means by which many cases of active pulmonary tuberculosis are being discovered. In Massachusetts the Army alone has rejected for military service more than 2,000 men because of actual or suspected pulmonary tuberculosis. In order to make this experience of value to the public health Massachusetts has adopted a system through which the names and addresses of rejectees are sent from the induction stations to the Department of Public Health. The state district health officer, working through local boards of health, pursues a follow-up that attempts to bring every case under control and treatment. This method has been carried out here in the District of Columbia through the efforts of the Tuberculosis Division of the Public Health Department. All cases of active tuberculosis of District of Columbia selectees rejected by the Induction Board at Fort Myer are reported to the District Health Department, and they are followed up in the same way as cases reported to the Department by physicians of the District. Every health jurisdiction throughout the nation should make use of this vast case-finding effort which is bringing to light many thousands of cases of pulmonary tuberculosis.

Private physicians are also finding that they have important responsibilities with regard to these selectees who are returned to the civilian population with active, suspected or healed tuberculosis. The rejected applicant may report directly to his family physician or be referred to him by the Health Department. If the physician is satisfied both from the X-ray and clinical findings that the patient has active tuberculosis it is his duty to report the case to the Health Department, to arrange for proper isolation and treatment, and to secure examination of all household contacts. If the patient has been rejected by the Induction Board with the diagnosis of "suspected tuberculosis" based upon inconclusive X-ray findings the physician must keep the patient under observation and by repeated clinical and X-ray examinations prove that the findings are of tuberculous, inflammatory, or other origin. A good percentage of these cases will be recalled by the Induction Board for another examination after 6 months, and if the condition was a pneumonitis or some other temporary lesion he may then be accepted for military service. Another type of case that will come back to the physician is the one with "inactive or healed tuberculosis." Such men are rejected by Induction Boards because the disease which appeared to be inactive or healed was so extensive that the Board believed it unsafe to subject him to the stresses of military service for fear that his disease would be reactivated. Such patients require observation by the physicians over a period of at least several years until it can finally be decided that the fibrosis and calcification are stable and permanent. Still another type of case is the one with the diagnosis of "primary tuberculosis." The physician must satisfy himself that the calcified nodules which are the evidence of the primary lesion are completely calcified and therefore stable and unchangeable. The physician will find it necessary in these cases to reassure the man rejected for military service that he does not have active tuberculosis, that he is in no danger of its becoming active, and that he cannot infect others with the disease. It must be constantly kept in mind that just as the private physician is the key man in the discovery and reporting of cases of tuberculosis in the civil population he has an equally important place in the management and guidance of these young men who are undergoing the tragic experience of rejection for military service because of some type of pulmonary tuberculosis.

I wish now to call your attention to some lessons to be learned from a comparison of the rejection rates for various causes of white and colored selectees.

For purposes of analysis the Surgeon General's Office classifies causes of rejection under administrative, educational, mental and physical headings.

The following table shows the rates of rejection per 1,000 selectees in these various classifications for the first 3 months of 1943 for the two races:

	White	*Colored*
Administrative	11.6	21.9
Educational	21.7	155.0
Mental	55.3	67.1
Physical (total)	180.4	203.2
All Causes	269.0	447.2

It is immediately apparent from the above table that the great difference in rejections between the two races is due very largely to rejection of colored selectees for conditions that are not physical, namely, administrative, educational and mental. The administrative causes, which refer to previous conviction of a felony, desertion from the military service, etc., do not bulk largely in the total figures, leaving educational and mental causes the chief contributors to the high rejection rate of colored selectees.

The following table serves to emphasize the fact that the most important causes of the high rejection rate among colored men are non-physical:

	White	*Colored*
All Causes	269.0	447.2
Administrative	−11.6	−21.9
	257.4	425.3
Educational	−21.7	−155.0
	235.7	270.3
Mental	−55.3	−67.1
Total Physical	180.4	203.2
Venereal	−1.3	−15.5
	179.1	187.7

The one cause above all others which increases the colored rejection rate is the educational requirement clause. It is true that there has been some relaxation in the regulations which require literacy for acceptance to the military service, but the services can absorb only a certain percentage of illiterate men.

If one now examines the physical causes of rejection it will be seen that venereal disease is a far more frequent cause of rejection in the colored race than in the white. Even with considerable relaxation in the regulations which permit induction of selectees with uncomplicated cases of venereal disease the rate remains 15.5 per thousand among the colored as compared with 1.3 among the white. If one makes a further subtraction in the above table to eliminate venereal disease from consideration, there is then very little difference in the rates of rejection for the two races.

That the matter of education among colored people is a socioeconomic problem needs no argument, and it is scarcely less apparent that the high incidence of venereal disease is due to the same causes, ignorance and poverty. Until society undertakes elimination of the causative social and economic conditions there will remain this great discrepancy between white and colored. The fact that the rates for rejection of colored selectees for most other causes besides those already mentioned is in nearly every case a little above the whites is probably due to the same fundamental causes, poverty and ignorance. Cardiovascular disease, for instance, probably has a direct relationship to venereal disease and the lack of proper treatment of infections. There are a few conditions, such as hernia, eye defects and gastrointestinal diseases, in which the rejection rate is practically the same for white and colored, and one, diseases of ears, nose and throat, in which the white rate of rejection is far above that for colored; but mostly the colored rates are above those for the whites.

There is no doubt that the Induction Board statistics furnish additional proof that the nation has in the education of the colored race and improvement of its economic condition a major socioeconomic problem which directly affects the health of the race. A situation should not be allowed to persist in which it is necessary to reject 178 more colored selectees than white in every one thousand of each race examined when the causes are plainly discernible and for the large part curable.

The impression has become prevalent because of the rejection of great numbers of men for military service that we are a dangerously unhealthy people. We should, of course, not neglect the warnings to bring about improvement wherever it is possible, but we need not be unduly apprehensive because of the high rejection rate for the military service. We must correct these conditions wherever it is possible, but it must be recognized that these selectees are being examined for a very special kind of service that requires extraordinary standards of physical fitness. Many rejections are due to conditions of the feet or eyes, for instance, which do not incapacitate for civil duties; others for such conditions as hernia which are curable by surgery. In other words, the rejection rate of Induction Boards should not be taken as a measure of the health standard of the nation, but only as an indication of the number of men within military age who are acceptable for military service with its high physical requirements.

No thoughtful physician can contemplate the effect of the present military mobilization upon the medical profession itself without much concern for the future. Up to the present time the profession has concentrated upon the problem of supplying a sufficient number of doctors for the armed services and at the same time maintaining the medical care of the civilian population and the teaching in medical schools at as high a level as possible.

The mobilization has resulted in diverting to the military services the great majority of the younger doctors who are physically qualified to serve. Criticism is occasionally heard to the effect that far too many doctors have been taken into the military services and that large numbers of them have very little to do. That this criticism is not justified is known to all who have any familiarity with the present situation or who know from experience the requirements of the Army and Navy in active warfare. It is true that long periods of relative inactivity are a part of military service, but the uncertainties of warfare are such that units must be mobilized, thoroughly organized, and made ready to work together as a team when the call to active duty comes. We can be very sure that the number of doctors in the military service is not in excess of the future needs which may become the instant needs at any moment.

There is no doubt that the profession has done an excellent job both in providing doctors for the military services and in maintaining the care of the civilian population. The latter has been difficult, not only because of the extra load thrown upon the doctors, most of them older men, who remain in civil practice, but because our greatly expanded industrial plants have required medical services far beyond those that were necessary in prewar days. There is little doubt that this expansion of medical services in war plants will carry over into postwar days and become a permanent improvement in the medical care of those engaged in the manufacturing industries.

The care of the civilian population has been made possible by the return to work of retired doctors; the assumption of heavier loads by many of those still in active practice; the return to general practice, in whole or in part, of many who have been specializing; and by careful planning by medical societies to redistribute the work of physicians within their own communities.

In spite of all efforts, however, there would be a shortage of physicians in both the military service and civil life unless more doctors were trained than has been done in the past. The efforts to accomplish this are familiar to you. Medical schools are now operating on a practically continuous schedule. Instead of the 4 full years previously required to complete the college course in medicine the student now has 4 sessions of 9 months each with only a month's vacation after each session. The hospital internship is now shortened to 9 months to correspond to the college year, and premedical training is shortened to 18 months instead of the 2 to 4 years which the majority had in prewar years.

The Army and Navy now exercise complete control over medical education, extending even to premedical years. It is true that the curricula established by the military services for premedical and medical training have been set up after consultation with the Council on Medical Education and Hospitals and the American Association of Medical Colleges and that the shortened courses and internships are a matter of mutual agreement. It should nevertheless be kept clearly in mind that all of these changes are emergency measures forced upon us by the necessity to provide more doctors, especially for the military services, in the years immediately ahead.

It is already obvious that there are great drawbacks to the present acceleration of medical education, and we should be on the alert to prevent its becoming a pattern for the future. Contracting the medical course to 3 years by eliminating long vacations places a severe strain on students so that they are unable to digest and assimilate the material which formerly was given in a 4-year period. It is likely to degenerate into a cramming process and to produce men with a great mass of undigested information who are not truly educated physicians. No one questions the necessity for the accelerated program to tide us over the emergency, but we must recognize the fact that although such training may produce acceptable technicians it is not designed to produce broadly educated physicians.

Since the beginning of this century tremendous advances have been made in medical education.

It is the opinion of most educators that although some minor changes and adjustments are indicated by the present experiment we will do well to return to our prewar system of longer courses and to thorough premedical training, both of which are designed to produce broadly educated men and to start them on their medical careers at a more mature age than the present accelerated method.

Some apprehension has been expressed that the present rate of graduating doctors, far above any that has prevailed in the past, will result in a great overproduction. There is little to justify such apprehension. Not only will losses be much greater than normal as long as active warfare lasts, but the needs for physicians after the war will be far greater than any we have known before. The latter will result, first, from retention of a large number of men in the Army and Navy, both of which will be many times larger than any military establishment we have had in the past; second, from greater demands for physicians in the expanding industrial fields; and third, from acceleration in public health programs which will require large numbers of men with medical training. Many also foresee a greatly increased research program stimulated by the advances in medicine which have taken place under the influence of the wartime needs.

We need have no fear that our doctors who have sacrificed themselves in war service will come back to unemployment. Our chief concern should be to provide means of postgraduate education to compensate for what we have lost through overwork and haste during the war years so that the quality of medical care may continue on an even higher plane than that reached when the war disrupted our institutions.

To assist in solving postwar medical problems a Committee on Postwar Medical Service has been formed jointly by the American Medical Association, the American College of Surgeons, and the American College of Physicians. This committee has under consideration many plans among which are those for relocation or redistribution of physicians returning from the armed services. It is also planning for graduate and postgraduate medical education and the completion of internships and residencies. Such careful planning and the undoubtedly enlarged field of public health and medical practice will go far toward insuring the future of returning physicians and good medical service for the entire nation.

Find therapy for poisoning from carbon tetrachloride. A promising new treatment for tetrachloride poisoning has been developed in England, *The Journal of the American Medical Association* for March 25, 1944 reports. Carbon tetrachloride is used as a cleaning fluid and extensively in various manufacturing processes and operations. Its toxic effects may be produced by absorption through the skin, breathing in its fumes as well as by taking it by mouth. *The Journal*, in commenting on an announcement in a recent issue of the *British Medical Journal*, says:

"Millions of pounds of carbon tetrachloride are used annually in this country, and cases of poisoning are not rare. Therapy has not been notably successful. A promising new treatment now comes from the combined efforts of physicians at a United States Military Hospital, E. T. O., and the Bernhard Baron Research Laboratories, Royal College of Surgeons of England. The report is based on a single case of absorbing interest which concerned an army air force pilot who accidentally ingested a large quantity of carbon tetrachloride. The report notes that the maximum therapeutic dose is 4 c.c. but that fatalities have been reported with doses as low as 1.4 c.c. In the case reported the amount swallowed was 30 to 40 c.c. and the indication was that the drug was completely absorbed, the immediate onset of symptoms indicating a rapid entry into the circulation. Vomiting in this case was not induced until forty-five minutes after ingestion. Enlargement of the liver . . . was demonstrable some nineteen hours after the carbon tetrachloride had been swallowed. About twenty hours after the ingestion the patient was given 2 Gm. of *dl*-methionine by mouth. This was retained, and three hours later 1 c.c. of a casein-digest-methionine solution was injected slowly into an antecubital vein. Since this was not followed by any immediate reaction, 5 c.c. more was injected, also without reaction. Continuous infusion of the solution by a drip apparatus was then begun, the rate of infusion being about 2 c.c. per minute. By the end of the next three hours, when 436 c.c. of the solution had been infused, the patient complained of chilliness, intense headache and backache, and some aching of the limb muscles. The infusion was then stopped. The liver at this time was still tender and had enlarged considerably. . . . The next day the liver was no longer tender. . . . On the next day—the third after the accident—the patient complained of dizziness and headache. Abdominal palpation revealed that the liver had again become enlarged. . . . That day the patient was given 2 Gm. of methionine by mouth in the morning and another 2 Gm. in the evening. On the fourth day the patient was alert and made no complaints. . . . The investigators . . . believe that the intimate cause of liver disturbance induced by carbon tetrachloride is an abnormal metabolism of methionine and related compounds. They also felt that in this patient the administration of the methionine was the specific influence that prevented further liver damage. . . ."

SOME EPIDEMIOLOGIC ASPECTS OF MENINGOCOCCAL MENINGITIS IN THE DISTRICT OF COLUMBIA

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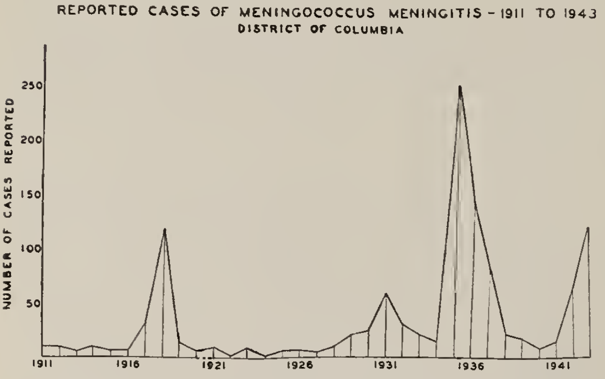
MENINGOCOCCAL meningitis or epidemic cerebrospinal meningitis was first described in the region of the District of Columbia in 1813, when a small outbreak was reported in Winchester, Virginia. The disease was again reported among soldiers in the District of Columbia in 1847 and in nearby Hall's Hill during the Civil War. In 1899 there was a quite severe outbreak, 82 deaths being registered. The disease was made reportable in 1907. Since 1910, as shown in the accompanying graph, there have been 3 outbreaks, the first occurring in 1918. A moderate increase in prevalence took place in 1931, and a severe epidemic occurred in 1935. The disease was still reported in large numbers during 1936 and 1937, following which the incidence remained at a low level until the present outbreak which made its appearance in 1942. The intervals between epidemics since 1899 have been 19, 18 and 6 years, respectively.



Seasonal incidence.—In this, as in other communities of similar latitude, meningococcal infections have been reported most frequently in the late winter and spring months. Epidemics usually have reached their peaks in March, but the present outbreak has differed in that the largest number of cases was reported in the month of May in 1942 and 1943. In the country as a whole the peak in number of cases this year was also somewhat later than in former epidemic years.

TABLE 1

Case and death rates per 100,000 population and case fatality rates (per cent) from meningococcal meningitis in the District of Columbia, 1934 to 1943, inclusive

	CASE RATE		DEATH RATE		CASE FATALITY	
	White	Colored	White	Colored	White	Colored
1934	1.7	1.3	0	1.3	0	100.0
1935	22.0	85.6	9.1	29.3	42.0	34.6
1936	11.8	34.4	5.4	19.9	46.1	61.4
1937	6.6	15.2	3.3	7.0	50.0	46.0
1938	1.8	1.7	1.1	1.1	62.5	66.6
1939	1.3	2.7	0.2	1.6	16.6	60.0
1940	0.9	1.6	0.4	1.6	50.0	100.0
1941	2.1	1.3	0.6	0.9	27.2	33.3
1942	6.6	9.7	0.5	2.8	8.0	29.1
1943*	11.2	22.2	1.4	3.5	12.1	16.1

* First 8 months only

Racial differences in morbidity and mortality.—As shown in table 1 the incidence of meningococcal meningitis has been higher in the colored population of the District of Columbia during the past 10 years than among white persons. Death rates likewise have been higher among the colored. However, the ratio of cases to deaths or the case fatality rate has been more nearly the same for white and colored populations. It may be assumed that the higher mortality rates per 100,000 population among colored persons is mainly the result of a greater number of cases. Both groups appear to respond about equally to treatment given.

Morbidity and mortality by age groups.—In 2 previous outbreaks of meningococcal meningitis, 1918 and 1935–36, a large proportion of the cases reported were in the younger age groups. In 1918, 84 per cent of the cases were under 30 years of age, with the greatest concentration in the 20 to 29-year group. Many of these were military personnel stationed in and near Washington. In 1935 and 1936 approximately three-fourths of all the cases reported (all District of Columbia residents) were under 30 years of age. In the present epidemic there has been a much more even distribution of cases, only 60 per cent being under 30. This change does not appear to have been caused by a change in the age distribution of the population. In 1920, 51 per cent of the population was under 30 years of age; in 1930, 48 per cent was in this group, and in 1940 about 45 per cent.

Fatality rates in prior outbreaks have been highest in the very young, i.e., under 1 year, and in the older age groups, 40 years and over. As shown in table 2 there appears to have been a greater reduction in mortality in cases under 1 year and those 40 and over than was the case in the ages from 1 to 39 years. The data also suggest that there may be wide differences in the severity of epidemics, because the fatality rates for some of the age groups during the 1918 epidemic compare favorably with those for the past 2 years. This factor must be taken into

TABLE 2

Number of cases of meningococcal meningitis reported by age groups in the District of Columbia and case fatality rates (per cent)

	NUMBER OF CASES REPORTED						CASE FATALITY RATES		
	1918		1935–36		1942–43		1918	1935–36	1942–43
	Cases	Deaths	Cases	Deaths	Cases	Deaths			
White									
Under 1 year	2	2	3	1	7	1	100.0	33.3	14.3
1 to 9 years	15	7	28	6	21	0	46.6	21.4	
10 to 19 years	17	3	31	14	16	1	17.6	45.1	6.6
20 to 29 years	44	5	35	11	23	5	11.3	31.1	21.7
30 to 39 years	8	1	22	13	14	0	12.5	59.1	
40 to 49 years	4	0	15	10	10	1		66.6	10.0
50 and over	2	2	10	8	17	3	100.0	80.0	17.7
Colored									
Under 1 year	1	0	10	7	4	1		70.0	25.0
1 to 9 years	7	2	73	20	17	5	28.5	28.2	29.4
10 to 19 years	8	3	48	13	10	2	37.5	27.1	20.0
20 to 29 years	6	3	29	14	11	1	50.0	48.2	9.0
30 to 39 years	3	0	18	13	14	1		72.2	7.1
40 to 49 years	1	0	6	6	10	3		100.0	30.0
50 and over	0	0	8	5	7	2		62.5	28.5
Total									
Under 1 year	3	2	13	8	11	2	66.6	61.5	18.1
1 to 9 years	22	9	101	26	38	5	40.9	25.7	13.1
10 to 19 years	25	6	79	27	26	3	24.0	34.2	11.5
20 to 29 years	50	8	64	25	34	6	16.0	40.0	17.7
30 to 39 years	11	1	40	26	28	1	9.1	65.0	3.5
40 to 49 years	5	0	21	16	20	4		76.2	20.0
50 and over	2	2	18	13	24	5	100.0	72.2	20.8

consideration in assessing the value or success of different types of treatment.

Geographical distribution.—Although meningococcal meningitis has been reported from all sections of the District of Columbia during the past 2 years, a large proportion of the cases were concentrated in the north central part of the city. Census tract 48, a notoriously crowded section in this area with a population predominantly colored, actually had more cases than all of the city west of Rock Creek Park. The disease was noticeably more prevalent in such crowded areas and where sanitation and housing conditions were poor.

Length of residence in the District of Columbia.—Cases of meningococcal meningitis have not appeared to occur more frequently among persons who have recently moved into the city than among those who resided here prior to 1940. Thirty-seven per cent of the cases reported in 1942 and 1943, for whom information was available, had always lived here, and 31 per cent had lived in the city for 3 years or longer. Only 2 cases had resided here less than 1 month, 18 had been residents for from 1 month to 1 year, and 8 for a period of from 1 to 2 years inclusive.

History of contact.—There was no report of contact between cases except for 2 men who had been drinking together, and a possible contact between 2 men working in different parts of a building under construction. Other than these instances there were no reports of secondary cases in schools, offices of various kinds, boarding houses or apartment houses, and other buildings housing large numbers of persons.

SUMMARY

Epidemics of meningococcal meningitis have occurred in the District of Columbia at irregular intervals since 1900. The incidence and mortality rates have been higher among colored than white persons. In 1942 and 1943 the disease has been more evenly distributed among the various age groups than during previous epidemics. Case fatality rates have been uniformly low, the greatest reduction having taken place in the very young and in those 50 years of age and over. The greatest prevalence of the infection was reported in the more crowded areas, but evidence of contact between cases was infrequent.

Urge blood study for all who return from malarious areas. The blood of all persons who have returned from areas where malaria is prevalent should be carefully examined and all those found to have in their blood the organisms that cause the disease should be treated, even though they have no symptoms, CAPTAIN STANIS P. CARNEY, Sanitary Corps, AND CAPTAIN NOAH B. LEVIN, Medical Corps, Army of the United States, advise in *The Journal of the American Medical Association* for April 8, 1944. In an examination of 2,723 Italian prisoners of war who had seen service for varying periods in malarious regions, the two army officers found the organisms causing malaria still in the blood of some of the prisoners months after evacuation from a region where malaria was prevalent. They found parasites in the blood of men who had maintained they never had had the disease, and also that malaria may be contracted with no symptoms of active disease until months after infection.

It is emphasized by the authors that "No expectation of the residual malarial rate of United States troops can be predicated from these [findings]. A great many of the Italians grew up in malarious regions and were exposed and infected long before their period of military service, while only a relatively small percentage of American soldiers come from areas where malaria is present in any degree at all. The antimalaria precautions taken for United States troops in the field also serve to keep the incidence of malaria down. An advice from the office of the Surgeon General of the United States Army indicates that the incidence of parasitemia in the absence of clinical symptoms for our returned troops is much lower than the figures reported here for the prisoner group. In spite of these differential factors, we feel that this study emphasizes the necessity for careful examination of blood smears for all personnel who have returned from areas where malaria is prevalent and the need for treatment to sterilize the blood in all cases of parasitemia. This will serve the double purpose of protecting the person from further attacks and of eliminating him as a carrier."

Of the 2,723 prisoners examined, 257 or 9.7 per cent had a positive blood smear; 56 or 2.1 per cent had active malaria; 188 or 6.5 per cent had a history of malaria; 33 or 59 per cent of those with active malaria had no history of malaria and 212 or 83 per cent of those with positive smears had no history of the disease.

The authors explain that it soon became apparent that malaria was going to be a problem of some concern in the prison camp "since immediately after arrival of the prisoners cases of malaria began to appear. The first question which arose was the problem of transmission of the disease to the uninfected prisoners, to the army personnel attached to the camp and to the nearby civilian population. This was satisfactorily answered by the results of two mosquito surveys made in the area in which the camp is located, one made by the state university and the other under the direction of the Seventh Service Command, in both of which no anopheline mosquitoes were found. As an added precaution, however, all men hospitalized for malaria were screened by mosquito bars after dusk.

"The proposal to send some of the prisoners to work on farms in the region of the camp raised another question. Since, in many cases, side camps were to be set up, sometimes many miles away from army hospital facilities, it was decided to make an attempt to locate all men with parasitemia."

RHEUMATIC ORCHITIS ASSOCIATED WITH RHEUMATIC PERICARDITIS AND EFFUSION

Report of a Case

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IT IS generally recognized that rheumatic infection is a generalized disease and can involve tissues throughout the body. However, involvement of the testicle by the rheumatic process is either of very rare occurrence or has heretofore been unrecognized. A careful search of the literature, including a survey of the Index Medicus back to 1910, yields very few and brief references.

Boyd[1] refers to "rheumatic vascular change involving the testicle." Bass[2] reports the case of a child of 2½ years who in the course of erythema nodosum and torticollis, considered to be rheumatic in origin, developed an acute orchitis and effusion with complete recovery in 2 weeks. Macleod,[3] writing in 1842, remarks, "I think I have several times seen rheumatism in the tunica albuginea. Persons subject to rheumatism have complained of acute pain, coming on suddenly accompanied by increased heat and great tenderness to touch, but without tumefaction, the symptoms shifting from one testis to another and at last disappearing as suddenly as they had come on just in the manner we see rheumatism change from one joint to another." Friedberg and Gross[4] cite the case of a child of 7½ years suffering from rheumatic heart disease who had abdominal and scrotal pain. Hinman,[5] Herman,[6] Young,[7] and Cabot[8] in their textbooks on urology mention that during the course of rheumatic fever the testicle may become involved.

It is because of its rarity and incomplete clinical description that we wish to report the following case. Although we cannot present histologic proof, we believe the clinical picture and subsequent course strongly suggest that the orchitis in this case was caused by the same rheumatic process responsible for the involvement of the pericardium.

REPORT OF CASE

I. T., a white male, aged 12 years, was admitted to medical service no. 2 at the Mount Sinai Hospital of Philadelphia on July 24, 1937, complaining of pain in the right testicle, pain in the left chest, fever and dyspnea. These symptoms had their onset 9 days before admission. The past medical history of this patient was negative except for chicken pox at 6 years and a tonsillectomy at 10. No previous illness resembling rheumatic fever or chorea was recalled.

Physical examination revealed a very ill patient with a flushed face, flaring alae nasi, marked dyspnea and slight cyanosis, temperature of 103° F., pulse rate of 120, and respiratory rate of 30. There was diminished expansion at the base of the left lung with impaired percussion and vocal fremitus below the angle of the scapula. Harsh breath sounds, a few fine crackling râles and pleural friction rub were heard over the same area. The area of cardiac dullness as determined by percussion was slightly enlarged to the left. The heart sounds were of diminished intensity but of regular rhythm. No murmurs were heard. A pericardial friction rub was heard at the base. The blood pressure was 100/58. The liver edge was palpable 2 fingerbreadths below the costal margin. The right testicle was enlarged to twice the normal size, tender and fairly firm. There were no signs of fluid in its sac. Lymph node enlargement was not noted. A penile discharge was not present.

The hemoglobin was 15 grams (84 per cent); red blood cells numbered 4,250,000; and the white blood cells 20,000, with 71 per cent polymorphonuclear cells. The urine contained a trace of albumin and 18 to 20 white blood cells per high power field. Urea nitrogen and blood sugar were within normal limits. Blood culture, blood Wassermann reaction and complement fixation for gonococci were negative. The sedimentation rate was 32 mm. in 1 hour. A roentgenogram of the chest was reported as follows: "There is a pleuro-pneumonic process of the left lower lobe. There is no evidence of pleural effusion. The heart is markedly enlarged to the left suggesting a pericardial effusion." An electrocardiogram showed a high take-off of the S-T segment in Leads 1 and 2. The S-T segment was below the isoelectric line in Lead 5. The interpretation by Dr. Benjamin Gouley was "acute pericarditis."

For about 10 days the patient ran a very stormy course with dyspnea as the outstanding symptom. His temperature varied between 100° F. and 103° F.; the pulse rate ranged from 90 to 130; and the respiratory rate varied from 20 to 45. The heart sounds became very faint and muffled. Signs of fluid developed at the left base, and a paracentesis of the left pleural cavity was performed. One hundred c.c. of thin, yellow, slightly turbid fluid was removed, which was sterile. A guinea pig inoculated with the fluid survived 6 weeks and on autopsy showed no tuberculous changes.

After the twelfth day the patient began to show improvement. The pericardial effusion gradually decreased in extent, the pneumonic process subsided and the testicular swelling and tenderness decreased. Cardiac murmurs were not heard at any time. The temperature subsided gradually, reaching normal at the end of 6 weeks. The sedimentation rate continued to be rapid, however, until the eighth week after the patient's admission. On discharge, September 25, 1937, the heart showed no auscultatory abnormalities. An X-ray film of the chest showed but little increase of the size of the heart to the right and no evidence of pulmonary consolidation or pleural effusion. Slight dullness and faint breath sounds were noted at the extreme left base. The electrocardiogram showed only negative T waves in Leads 1 and 2. The right testicle was of the same size as the left and showed no induration or tenderness. The urine showed no white blood cells.

Treatment consisted of the administration of oxygen, the use of salicylates in large doses (up to 140 grains a day) which he tolerated very well, and the drinking of citrates and fruit juices. The orchitis was treated by elevation and the application of cold.

The patient was seen 8 months after discharge and again 1½ years after recovery. He had attended school regularly, had been in good health, and had engaged in several athletic sports. Examination of his heart showed no abnormalities. The right testicle appeared perfectly normal and was of the same size and consistency as the left.

COMMENT

The fact that this case began with acute orchitis and terminated with pericarditis with effusion justifies the conclusion that the orchitis was neither a separate clinical entity nor of a different etiology from that causing the pericarditis. We feel that tuberculosis was excluded by the examination of the fluid, guinea pig inoculation, and the subsequent clinical course. The same objection holds good against any pyogenic organism, including the gonococcus, as a cause of the orchitis and pericarditis.

The rheumatic etiology in this case is supported by the work of Massie and Levine,[9] who in a follow-up study of 135 patients who had previously been ill with acute rheumatic pericarditis found that a number of them had no evidence of heart disease. They found that whenever there was no previous history of rheumatic infection and if there was no evidence of valvular involvement during the pericarditis recovery was essentially complete.

The case presented meets, we believe, the criteria outlined by Massie and Levine and coincides with their observations.

SUMMARY

A case of orchitis, most likely rheumatic in origin, associated with pericarditis with effusion, is reported. Recovery was complete, and the cardiac examination was normal after a follow-up of 1½ years.

Addenda. About a year ago we came across an article in the Italian literature, published in 1913 or 1915, in

(*Continued on page 166*)

Editorials

THE PHYSICIAN IN MODERN SOCIETY*

My association with the medical profession began twenty-three years ago. Scientifically, medicine has made great progress during these years. Not a few therapeutic measures which are common today were then either unknown or not generally applied. For example, Banting discovered insulin in 1921 and its use was still limited in the early twenties. Vitamins did not hold the place in the physician's armamentarium that they do now. Blood banks as we know them today were comparatively unknown when I first made my intimate contact with medicine. The sulfa drugs were, of course, far in the future. Yes, many glorious pages were written in medical history during this period. But scientific progress brought with it other problems, the most controversial being the charge that the knowledge which had been gained could not be properly put to use because of antiquated methods of delivering medical service. The manner of conducting a medical practice, it was claimed by those favoring drastic modifications of the present system, had changed very little and physicians were still carrying on as they did in the horse-and-buggy era.

I know that you have heard a great deal about the social and economic problems of medicine and I will therefore not dwell upon them except to say that ever since the Committee on the Costs of Medical Care published its report more than a decade ago, there has been agitation for change in medical practice. On the left have been those who see only one solution, a Government system of medicine, commonly referred to as "socialized medicine." On the right—and we of organized medicine are usually placed in this category—are those who insist upon the status quo. Then there are the "middle-of-the-roaders" who do not favor a Government system of medicine but recognize that new methods of providing medical care are needed. The latter favor experimentation with voluntary sickness insurance, medical service plans, group hospitalization and group practice. Contrary to the general belief, a large segment of organized medicine are "middle-of-the-roaders" and believe that change is not only inevitable but desirable.

At the present moment medical societies throughout the country are experimenting with medical plans of various sorts. Business establishments, industries, groups of physicians and others are also actively engaged in providing medical care by various means. I think that this is a healthy situation and I am confident that the end-result will be satisfactory to the people and the medical profession of this country.

Whatever methods of providing medical care gain final acceptance, I am convinced that private practice will continue to exist. People will demand the right to employ their own physicians. What will undoubtedly happen is that in general physicians will participate in whatever plans are adopted, whether they be sickness insurance or other forms of distributing medical service, and at the same time carry on their private practices. This will require that physicians conduct their practices much more efficiently than they have in the past. Better organization in their offices will be imperative. Records will of necessity have to be accurate, for participation in any plan will make this essential.

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* From a talk given by Theodore Wiprud, Secretary of the Medical Society of the District of Columbia, before a joint session of the Honor Society of the College of Medicine, Howard University, and the Medico-Chirurgical Society, Inc. of Washington, D. C., on February 24, 1944.

The inefficiency which has characterized the physician's business methods will not be tolerated. While this may prove irritating to many physicians, it will have a beneficial effect where their private practices are concerned.

Most medical schools have been so busy training physicians scientifically that they have given little or no attention to the practical aspects of establishing and conducting a practice. I feel that this has not only been unfortunate for the physician himself but for the patients whom he serves as well. The young physician usually flounders about considerably and makes many unnecessary mistakes before he finds himself. If he receives guidance at all it is from some older physician who has learned what he knows by experience. Perhaps the older practitioner has had the benefit of sound advice, in which event he is fortunate indeed. In general, where the establishment and conduct of an office is concerned, the physician's training still follows the pattern of the preceptor system under which many physicians received their scientific training in the 1870's and 1880's. The point need not be labored that this is a most unscientific approach to a vital matter by a scientific group.

Since I became an officer of a medical society I have had an unusual opportunity of observing physicians. Again and again I have been impressed by the handicaps under which the young physician enters practice. He is trained, as I have said, to a high degree to supervise and care for the health of his patients, but beyond this he finds himself most inadequate. I have given personal assistance to many hundreds of these young physicians over the years. A move in the right direction I feel was taken by Marquette University School of Medicine when in 1931 it decided to experiment with a ten-hour course devoted to the every-day problems of the doctor. I conducted this course for some seven years and I like to feel that at least some of the fledglings found it helpful.

Now, I want to make it clear that too much emphasis can be placed on the efficient conduct of a physician's office and especially upon the business aspects of medical practice. There has been evidence that commercialism has invaded medicine to a disturbing degree in recent years. This has grave import for the medical profession. For medicine is not a business, it is a high calling. Any young man who takes up medicine with the intention of making money is either misguided or is potentially a public menace. But there is a business side to medicine to which physicians should give their earnest attention in the interest of their patients and themselves.

EXTENDING MEDICAL SERVICE*

As leaders of the American medical profession gathered in New York for a conference called by the National Physicians' Committee to consider the extension of medical care, and to continue the fight against Government-controlled socialized medicine, they were encouraged by the results of a public opinion survey indicating that a majority of the American people are siding with the doctors in their fight with the politicians. But in placing the major emphasis on prepayment plans to cover the cost of illness, the Physicians' Committee again indicated that our doctors are fighting on the defensive and do not fully comprehend the public demand for more progressive medical practices.

How medical bills are to be paid is but one phase of this highly controversial subject, important though it is. The fact that 63 per cent of the people believe that the time has come to adopt a method providing for easier payment of medical bills and that only 16 per cent favor a compulsory Government insurance program does not mean that the public will be satisfied with voluntary insurance plans which will cover surgical, medical and hospitalization expenses. Along with that, people want an extension of clinical methods and preventive medicine which the doctors themselves have shown are the most economical and most effective means of keeping them in good health.

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* From the Pittsburgh *Post-Gazette*, March 10, 1944.

It was our more progressive doctors, not our bureaucratic politicians, who developed the clinic to keep pace with the growing specialization of medicine. In the beginning most patients were sent to clinics by family doctors who wanted the experts to diagnose their ailments and prescribe the cures. At that point the opportunity of a patient to choose his own physician began to break down, because he did not even know the names, let alone the reputations, of the various men in white who examined him as they gave him a thorough going-over. But having found that he could save money and get better care by going to one clinic instead of to many specialists, your average American wants the clinical method developed and expanded so that the most modern medical practices will be available to all.

In combating the politicians who favor Government-controlled socialized medicine, therefore, our doctors must not think they will have won their battle when they have set up voluntary prepayment plans by which people can pay for medical care under an insurance system. They must be as wise in their own way as the politicians are in theirs. They must realize that they have taught the American people how the best medical care can be provided most economically; and they must beat the politicians to the punch by devising the ways and means of making that economical best care available to all.

WAR ON APPENDICITIS

With the world seemingly intent on self-destruction, and the fruits of science being directed almost exclusively to mass murder, the physician's place in modern civilization as a saviour of human life appears to be a contradiction in terms. The physician stands today almost alone, the one remaining branch of science struggling to save life rather than to destroy it. His efforts, therefore, in the preservation of human life and his day-to-day achievements seem almost puny in comparison with the wholesale destruction going on about him. And yet to the doctor a human life is still worth saving. He plods along with the faith that some day wars will cease, and he carries on a single-handed fight against the ravages of death. He finds himself still vitally concerned with sickness and disease, with medication and surgery, with prevention and cure.

In the pages of our daily newspapers we may find, with monotonous regularity, the current reports of fatal accidents due to traffic. Such useless loss of life is deplorable, of course, and every agency is being employed in efforts to curb it. But, in sharp and alarming contrast, one rarely finds in the news columns any report or mention of the useless and preventable deaths due to appendicitis, even though more than twelve thousand people died unnecessarily last year.

This woeful and needless loss of life can and should be eliminated, but it will be accomplished only through public enlightenment of the dangers involved in home cures and remedies.

Therefore, the problem of avoidable and unnecessary mortality which results from public ignorance and neglect is one of primary concern, and this is particularly true in the treatment of appendicitis.

Some of the fault, of course, is ours. We have failed, at least in one respect, to disseminate the information, and the public has suffered through lack of knowledge. Some physicians regard appendicitis too casually. It is a disease to be respected and feared. It should be our direct responsibility to make the layman understand these dangers and to spearhead a program of public enlightenment on this important and vital topic.

Through the efforts of our medical organizations, the press, the radio and the movies might easily be brought into play to broaden public knowledge, and it should be our obligation to sponsor such an undertaking.

Today, with so many of our medical men entering the armed services, the situation becomes even more acute because of the growing lack of medical care, especially in our thickly populated centers. We must realize that this condition will continue to grow worse, not better, until the war is over.

The layman must be taught what not to do until adequate medical attention can be secured. One wrong step will place the patient in peril of his life, and frequently beyond the skill and power of any surgeon to correct.

That twelve thousand deaths last year were "avoidable" and "unnecessary" is literally true. Most of them might easily have been prevented had not the patient been kept in ignorance of the seriousness of his ailment and the proper steps to take.

Let us glance a moment at some of our achievements. Typhoid fever has been controlled and diphtheria is being wiped out. We are making considerable progress in educating the public to recognize the early symptoms of cancer. We contribute generously to educational programs for child health and protection. We constantly seek opportunities to care for and educate crippled and helpless children. We have done extensive and commendable work in the prevention and cure of tuberculosis. And yet we still had more than twelve thousand deaths from appendicitis in 1943.

The deaths recorded are not due in reality to primary appendicitis, but to peritonitis or other complications arising from the infection that follows rupture of the appendix. It is not appendicitis (in itself) that kills these twelve thousand folk each year. Primary appendicitis seldom kills anyone. It is the ruptured appendix that accounts for this unnecessarily high mortality.

Why, then, do so many appendices rupture? Stated very simply, the whole trouble comes, first, from the amount of time that elapses between the onset of the initial symptoms and the time of operation, and second, from the giving of laxatives and cathartics. When these evils are corrected, and only then, will we cease to have deaths from appendicitis.

Considerable credit and recognition must be given Dr. John Bower of Philadelphia and his associates for the active and intensive campaign against appendicitis conducted throughout the state of Pennsylvania. The result of his campaign was a reduction in mortality of about 60 per cent. This was accomplished by approaching the problem in the following manner:

1. Informing the public of the dangers of delay in seeking medical advice and the dangers of using laxatives in the presence of abdominal pain.
   (a) Printed stickers were sent to physicians reading, "In the presence of abdominal pain give nothing by mouth. Never give a laxative. Apply an ice-bag to the abdomen. Call your family physician. Abdominal pain which persists for six hours is usually dangerous." A sticker was attached to each monthly statement sent to patients by the physician.
   (b) Placards supplied by the Association of Retail Druggists were conspicuously displayed in drug stores and read, "APPENDICITIS: Severe pains in the stomach are often dangerous. Do not take purgatives. Call a physician. Deaths from Appendicitis are increasing annually." Another placard read: "THE DIRECTOR OF PUBLIC HEALTH REQUESTS THE FOLLOWING: (1) That each purchaser of castor oil, citrate of magnesia, epsom salts and other laxatives be questioned

if the drug is to be given in the presence of abdominal pain. (2) That you do not resort to laxatives in the presence of abdominal pain until you have consulted a physician."

2. Request the surgical staff of hospitals to study carefully the mortality of appendicitis as compared with appendicitis associated with peritonitis and to adopt measures to combat the uniformly high death rate of the latter.
3. A semi-annual or annual report of results obtained should be sent to the deans of medical schools, deans of pharmacy schools, members of surgical staffs and outside physicians.
4. Teach students, interns and physicians in general practice to diagnose appendicitis early; to differentiate between appendicitis and appendicitis with peritonitis; to appreciate the importance of the increase in mortality with the increase in time between onset of symptoms and operation, and finally to aid in educating the public.

It seems only logical to assume that similar results can be obtained here in Washington by instituting an intelligent approach to this problem, and it seems increasingly evident that a reduction in mortality can be effected by at least 50 per cent the first year. But this will come about not so much as a result of further scientific research, precision of diagnosis and operative technic, as it will through the broadening of public knowledge. The scientific aspects are not at the root of the problem. Education, knowledge and enlightenment are needed. We must pledge ourselves not only to continued research and perfection of our surgery, but also to throw the sharp, white searchlight of intelligence into the dark corners of ignorance. Only by so doing can we emerge victorious in our constant struggle in the physician's war against avoidable death from appendicitis.

Plans are now being formulated here in Washington for an extensive educational campaign on this subject with the coöperation of a number of agencies connected and allied with the medical profession.

Edward A. Cafritz, M.D.

In and Out of Focus

BY THE OBSERVER

Army-Navy Night a Success A large and enthusiastic audience was on hand for Army-Navy Night held in the Medical Society's auditorium on the evening of March 24. In many respects it was an event which will long be remembered by those present.

Following a brief talk by Dr. Fred R. Sanderson, President of the Medical Society, Dr. Matthew White Perry, who presided, introduced Major General George F. Lull, Acting Surgeon General of the Army. Speakers of the evening were then presented. They were Vice Admiral Ross T. McIntire, Surgeon General of the Navy, and Lieutenant General A. A. Vandegrift, The Commandant of the United States Marine Corps. Both addresses were highly interesting, informative and inspiring, and directed particularly to the guests of honor, the wives and the parents of the Washington physicians in the armed forces. Admiral McIntire spoke extemporaneously, but General Vandegrift read a prepared talk. However, he departed from his text at frequent intervals, emphasizing points by telling of some incident. General Vandegrift was kind enough to turn his manuscript over to your Observer and the written portion of his address will appear in an early issue of the Medical Annals.

A most pleasant surprise was the unusually fine entertainment provided by the Volunteer Camp Shows of the District of Columbia under the direction of Mrs. Mary Davis, Program Organizer. From this standpoint alone the program was outstanding. The three performers who participated were Miss Joan Elinor Feole of Washington, Private John Buckmaster of the United States Army, and Storekeeper Warren Plaster, 2/c, U.S.N. Miss Feole, who is a native Washingtonian, sang several light operatic numbers beautifully. Private Buckmaster proved himself to be a finished and unusually talented performer. It was not surprising therefore to learn that he is a son of Gladys Cooper, the British actress, and is a well known performer in his own right, having had long runs at the Versailles, Monte Carlo and Savoy Plaza in New York. Storekeeper Plaster has appeared with several symphony orchestras throughout the country as concert pianist and has made several recital appearances since being stationed in Washington. The Society is not only deeply indebted to these artists but to Mrs. Davis who selected them for ARMY-NAVY NIGHT.

At the conclusion of the regular program a buffet supper was served in the Library, which unfortunately was somewhat small to accommodate the large crowd present. However, everyone seemed to enjoy the social hour, which was the main thing after all.

Before your Observer forgets it, he should tell you that ARMY-NAVY NIGHT was originally suggested by Captain Darrell C. Crain, who is now in Australia.

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Over-specialization One of the foreign medical journals which comes across your Observer's desk is the *Proceedings of the Royal Society of Medicine* (London). In the January, 1944 issue there appears an address by Sir Weldon Dalrymple-Champneys on the place of the doctor in the state from ancient times to the present day "together with certain speculations regarding the future." Toward the close of his scholarly historical review, Sir Weldon has this to say about over-specialization:

> ". . . we have been struck by the way in which decadence in medicine has coincided with over-specialization on insufficient knowledge. Can we feel so safe against the recurrence of this danger? You may say that modern medicine is truly scientific and that a high degree of specialization is necessary if we are to reap the benefits of new discoveries and expert procedures. There is much truth in this contention, but even in these enlightened days we know of manufacturers launching new remedies on the market based on new discoveries but backed by extravagant claims not justified by the scientific evidence available, remedies snatched at by harassed practitioners in the hope that them may benefit patients whom nothing seems to cure or even alleviate; we know that there are specialists whose outlook is so cramped that they tend too often to attribute their patients' ailments to some unusual condition in their own sphere. The only sure defence against over-specialization is, I believe, to give the general practitioner a dominant share in the care of the patient, and to fit him for this important position in the State, we must see to it that he is rightly educated. All of us who have been medical students know the fascination of the study of fully developed disease, the care of dangerous illness, and the dramatic appeal of difficult operations. But the prevention of disease and the achievement and preservation of perfect health, both physical and mental, also have a compelling appeal if presented by teachers who have the right outlook on health and disease, and I refuse to believe that the medical student of today, the brother of the radiolocation operator who accurately fixes the unseen aircraft at an incredible distance; and of the anti-aircraft gunner who hits a target he cannot even see—I cannot believe that the medical student in his turn is incapable of feeling the fascination and satisfaction of detecting the first glimmering of ill-health in his patient and defeating it, of adjusting his patient to the environment with the same pride and accuracy with which the skilled member of a R.A.F. maintenance crew adjusts his 'kite.'
>
> "I have heard it maintained that the general practitioner should concern himself solely with so-called 'clinical medicine,' by which I suppose is meant the treatment of developed disease—in other words, he is to turn a blind eye to the opening stable door, waiting until the horse is loose to start chasing it. Surely this is entirely contrary to all the traditions of our profession—and indeed contrary to common sense. No one, I think,

expects the general practitioner to be an expert on environmental hygiene, though he should understand its principles; or to be an epidemiologist, though he should certainly be familiar with the ways in which infectious diseases are transmitted. But if he is to do his duty as the guardian of the patient's health he must know three things: first, his patient's heredity and environment, including his home circumstances and conditions of employment—in short all the factors which may result in a deviation from perfect mental and physical health; second, his medical history and present condition; and third, but by no means least, all the agents, including not merely methods of treatment, but also all the public and private organizations, which can be invoked to restore him to his normal or a condition better than this.

"During the last two centuries the good general practitioner has established himself in the esteem and affection of his patients as a guide, philosopher and friend, though recently certain social tendencies and the growth of specialization have, as I have already pointed out, tended to some extent to undermine this position, to the detriment of the people's health. We must not only reëstablish him as the trusted confidant and guardian of the patient and of the family, but we must strengthen his position in every possible way, placing in his hand all the weapons that modern science and State organization have provided.

"I am convinced that the general practitioner is today presented with a wonderful opportunity—which if neglected, may never recur—of occupying a key position in medicine and in the State, and from that position exercising an incalculable influence for good on the health and happiness of his fellow countrymen, thereby ensuring to himself a life of absorbing interest and abiding satisfaction in the greatest of all professions.

"Let us promote the private practitioner to be a general practitioner, a real general marshalling all the forces of the State and voluntary organizations for the capture of health."

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Our Last Chance? Representative Walter H. Judd of Minnesota is not only an able legislator but highly regarded as a physician. Widely known as an inspiring speaker, he made one of his most eloquent pleas to the medical profession for constructive action at the National Conference on Medical Service held in Chicago on February 13, 1944.

Your Observer is indebted to *The Medical Bulletin of the Sedgwick County Medical Society* (Wichita, Kansas) for the excerpts from a summary of Dr. Judd's address which follow:

"You ask why waste a doctor in Congress and the question is valid. My answer is taken from a wiser physician than we who once said, 'They that are well need not a physician, but they that are sick.' And I believe that our greatest need today for a physician is in Congress.

"This statement is broader, more sincere than may seem on the surface. Congress needs men who are trained as the physician is trained, who sees things as the physician sees them, who is interested in cure and prevention and advancement at the same time. Congress needs our help as physicians.

"We are doctors, yes. But first we are citizens. We are the fathers of sons who are getting killed, first, and physicians next. This second part of our responsibility we have discharged creditably. Our professional skill is at its highest peak and so is our professional patriotism.

"But we cannot ignore the fact that the quality and distribution of medical care in America today is inadequate and imperfect. This does not affect a large proportion, perhaps less than ten per cent. At least eighty to ninety per cent of our population has the best medical care in the world.

"There are groups, however, who focus their attention only on the ten per cent, and then plan to scrap the ninety per cent good to salvage the minority. Moreover, these groups have access to machinery that is influential and they mean to carry out their program.

"When you look at medical care as a purchasable commodity and compare it with food, for instance, you can see why their plans gain an audience. Whenever a shortage exists in any necessary commodity this must either be rationed or it will be accessible only to the highest bidder. One or the other of these results will grow out of our present shortage of physicians. It now rests with us to choose. 'If we don't lead, I promise we will have imposed on us, the solution.'

"Of course, our hope is to salvage what is good in our present system and ultimately to perfect the part that is lacking today. But we will not do that if we permit politicians to work out their own plan. In this, the relationship between the doctor and his patient is destroyed. In this plan inefficiency is upheld.

"We must have better representation in Washington. We need a liaison between government and our profession. 'Those who sell what's bad are getting away with it. Why can not we, who merely want to hold to what's good and add that which is better, do the same?'

"We need a department of health in the president's cabinet but this does not seem to be a near possibility. We must have a two-way communication with Washington. The seven doctors in the House cannot represent medicine. It would be most harmful if we tried to. We represent the people who sent us to Washington. But, and I speak from experience, we need to know what you want and you need to know our problems.

"That the medical profession is weak on this point can be shown in two illustrations. First, you recall the amendment on standards that passed with the Soldiers' Wives Bill. We had no previous knowledge that this amendment was coming up. We were not warned beforehand. Not one single doctor wrote us, presumably because they didn't know about it either. But the chiropractors and the osteopaths knew about it. They went to their friends and urged the passage of this amendment. They had organized their forces and the amendment passed.

"The second illustration is on the same subject. A Congressman friend of mine told me this story. He voted against the amendment. Then later when he visited in his state, 53 quacks of all descriptions called him to complain about his action, but not one doctor remembered to thank him.

"Please help us. Show us what you want us to do. I plead for unity but not blind unity. You must have a good program first. And that brings up the Wagner-Murray-Dingell Bill. It cannot pass this Congress. 'Thank God you have a breathing spell but it's your last chance. You've got to come through.' And you have to come through with a program—the program you want."

★

S. 1161 Hasn't a Chance... Lewis

Many physicians in Washington are personally acquainted with Fulton Lewis, Jr., nationally known ace news commentator of the Mutual Broadcasting System and a columnist for the *Washington Times-Herald* and other newspapers. For a time he was associated with the Medical Society of the District of Columbia, subsequently becoming engaged in radio work. Although extremely busy covering the political scene, he is still interested in medical matters. It is, therefore, not surprising that he should express himself on this subject publicly.

Mr. Lewis is unalterably opposed to the Wagner-Murray-Dingell Bill. On the other hand, he has been critical of organized medicine because in his opinion it has failed to offer an adequate health program. Recently he set forth his views on the subject in a rather vehement article, portions of which are here quoted.

First of all, Mr. Lewis says that the medical profession is taking the Wagner-Murray Dingell Bill too seriously. He writes:

> "The truth is that neither Senator Wagner nor Senator Murray commands sufficient influence in the present Congress to be a competent enemy of medical science or anything else. The Wagner-Murray bill hasn't a stepchild's chance of being passed. The present Congress has no stomach for such stuff, and both Wagner and Murray probably know that, as well as anyone.
>
> "The tragedy is that far behind this frenzied boxing bout against shadows of the moment are powerful realities which eventually are certain to explode."

Wherever he has gone throughout the country, Mr. Lewis has endeavored to ascertain the views of physicians. On this subject he says:

> "The vast majority of rank-and-file doctors of the country—and I've talked to hundreds of them—seem to sense these practical realities, and comprehend the import of them. The American Medical Association, with its cloistered leadership, which talks mostly to itself, doesn't seem to have the slightest understanding of it all.
>
> "Those realities are that until the politician is robbed of his bait, which he dangles before the public eye, other Senator Wagners and other Senator Murrays will continue to use that bait, making a little more progress each time.
>
> "When the war is over, and tens of thousands of Army and Navy doctors face the problem of returning to private competitive practice, which will be infinitely more crowded than ever before, many of them may be distinctly friendly to the security of steady salary of Government medicine.
>
> "But the A. M. A.'s only answer is to rant against the dangers of it, and the injustice, and to try to make the realities nonexistent by the mere denial that they exist.
>
> "This is suicide. If their own interests were all that is at stake, the suicide wouldn't matter. But it's not. If the tawdry, searing paws of politics ever set their grip on American medicine, it's the people as a whole who will suffer, far more than the doctors and far more than the American Medical Association. For that reason, the public has a tremendous stake in preventing it."

Mr. Lewis' language here is extravagant and the picture he presents in several aspects is overdrawn. However, dangers inherent in the political domination of medicine cannot be overstated.

What solution does Mr. Lewis offer? Here it is:

> "The cure is not lobbies in Washington, which some of the A. M. A. leaders want to establish. It is not a publicity campaign to fight socialized medicine; no publicity campaign can help, unless the facts of the situation are right, and if they are right, a publicity campaign isn't necessary; it is not the adoption of union-like, strong-arm methods, which others of them want, agreeing among themselves to refuse to coöperate with Government-controlled medicine, if and when it comes.
>
> "The very proposal of these methods shows how totally lacking the A. M. A leadership is, in a real understanding of what the medical profession is facing.
>
> "The only cure is for the medical profession itself, in its own good way, to do the job, and cure the basic problem. In that way, the politicians' bait is gone; the palling danger of Government-controlled medicine is eliminated; the whole problem is permanently solved, because the politician has nothing to offer."

We regret Mr. Lewis' failure to mention the success which has attended efforts of organized medicine to meet the issues with which it is confronted. Nevertheless, he is right when he points out that the present situation is a challenge to the medical profession. Furthermore, those who know Mr. Lewis emphasize the fact that even though harshly critical he is not unfriendly to the medical profession. He is deeply concerned, they say, lest the doctors do not take threats to their profession seriously.

★

The Flight Surgeon's Patients

"The round-the-clock maintenance of the physical and mental fitness of . . . men engaged in combat flying is the Flight Surgeon's primary mission. Consequently, aviation medicine is everything in military medicine plus the medical engineering of the human body for high-altitude life." Thus Major General David N. W. Grant, The Air Surgeon of the American Air Forces, describes in the March, 1944 number of *The Military Surgeon* one of the fields of medical science in which physicians are pioneering.

Of the demands made upon our flying personnel, General Grant says:

> "Everyone in this audience, I imagine, has paused in his ground duties to watch a B-17 'Flying Fortress' pass overhead. Its mighty outline, its complete mastery of the air, makes this business of flying bombs to Berlin appear quite simple.
>
> "As a matter of fact, it looks simple only because the idea of flight is simple, and because men make any field which they master seem simple. One look into the pilot's cabin of a B-17 will convince you that its flight is actually an engineering operation demanding manual and mental skills which put the driving of an automobile in the kiddy-car class of human learning. The compartment is lined—front, sides, ceiling, and part of the floor—with controls, switches, levers, dials, and gages. I once counted around 130.
>
> "The coördinated operation of all these gadgets would be difficult in the swivel-chair comfort of your office. But—cut the size of your office to a five-foot cube—engulf it in the roar of four 1,000-horsepower engines—increase your height above ground to four or five miles—reduce the atmospheric pressure by one-half to two-thirds—lower the outside temperature to 40 or 50 below zero. Then, to meet these strenuous conditions, get into a flying suit, gloves and shoes all heated by electricity—put on a helmet with earphones—cover your eyes with goggles and the rest of your face with an oxygen mask containing a microphone—strap on your parachute—and it might be well to add about 16 pounds of body armor.
>
> "That will give you a general idea of the normal conditions under which the pilots, navigators, and bombardiers must work out the higher mathematical relationships of engine revolutions, manifold and fuel pressure, aerodynamics, barometric pressure, altitude, wind drift, air speed, ground speed, position, direction, and plane attitude.
>
> "Of course, you may have to face an occasional pain from aero-otitis media, aero-embolism, or intestinal gas expansion; a touch of dizziness or nausea from airsickness; numbness from cold, or the subtle comatosity of anoxia.
>
> "There will be interruptions from flight operations to man machine guns against enemy attack. Also, due allowance must be made at times for a stream of machine gun bullets or for the burst of ack-ack shells in your immediate vicinity.

> "As the final touch in this bizarre picture of intense concentration amid intense distraction, add the fear of death."

Fortunately for our boys who fight our battles in the sky, there is no brighter chapter in this war than the progress made in aviation medicine. Thanks to the untiring efforts of the medical personnel of the Air Corps of the Army and the Navy, the hazards of combat flying are being steadily eliminated.

★

Are We Doing Our Duty?

One gathers the impression from reading both lay and medical publications that many of our boys with the armed forces overseas are much irritated with the folks at home. They express their displeasure in strong words because of our failure to take the war seriously.

Your Observer thinks this is rather unfortunate for in his opinion it is untrue of a majority of our citizens. There are those, of course, who seem oblivious to the fact that we are engaged in a desperate war in which we must put forth every ounce of strength to win. On the other hand, most of us are deeply conscious of our responsibilities and are doing everything possible to end this conflict successfully as soon as possible.

There is hardly a home in the land which is not represented in the armed forces. One does not need to be very imaginative to realize how those left behind feel and how anxious they are to do all they can to bring their loved ones home at the earliest possible moment. It is not all fun on the home front either. Our duties in civilian life are much more numerous and exacting than in peacetime. This is perhaps more true of physicians than of others, but we all have our share of burdens.

We who take our responsibilities seriously deplore such exhibitions as the trek of race-track followers to Florida when our boys are giving their lives on the battlefronts of the world. These people should be brought to the realization of what is expected of them.

Of course, our boys in the services do not want to think of us in sackcloth and ashes. They want to feel that their homes are still as they remember them—pleasant places where people laugh and are happy. And thank God this is true.

We hope that the truth will be made known to our boys so that they will realize that we are not letting them down.

★

N. P. C. and Public Relations

As most physicians know, the medical profession is by no means unanimous in its approval of the National Physicians' Committee. In a number of states, medical leaders as well as the rank and file of physicians are enthusiastic and approve heartily of the work being done by the Committee. On the other hand there are those who are severely critical. Opinions pro and con are frequently voiced in medical publications. In its March, 1944 issue the *Westchester Medical Bulletin* reviews the history of N. P. C. and states its disapproval in these terms:

> "It has been and is the conviction of the editors of the *Westchester Medical Bulletin*, speaking for themselves, that any information about the aims and ideals of American medicine which cannot be freely and openly stated by the American Medical Association had better be left unstated. The same is true of its constituent state and county societies.
>
> "Without in any sense impugning the honor, the integrity, or the purposes of the members of our profession who have supported or participated in the organization of the National Physicians' Committee, we submit that, in our opinion, the very organization and existence of the Committee constitutes an act of subterfuge on the part of the American Medical Association. Such an act plants the seed of public discredit and even of possible destruction of our national organization. We the editors of the *Bulletin* consider that the argument—used as a pretext for the establishment of the National Physician's Committee—that the A. M. A. would be subject to taxation if it undertook its own public relations program, is entirely without foundation.

"We look upon it not only as a right and privilege, but a duty, for the organized profession, under its own name and upon its own responsibility to publicize its record of achievement to the people and to interpret to them the case for the continuation of evolutionary medical development in the United States. Together with most of our lay friends, we find in the genesis and tactics of the National Physician's Committee a cynical element of pretense and trickery which is offensive to intelligent citizens and does the utmost discredit to the ideals traditional to our profession.

"We believe an honest mistake in judgment has been made, and we call upon all our colleagues who care for the good name of the profession to rectify this error. When a cancer is recognized, one does not let it go on to metastasize."

Your Observer is also of the opinion that the A. M. A. should act and speak for the medical profession. He would emphasize that satisfactory public relations is dependent not so much on what we say but on what we do.

★

"....a life of Riley" There are thousands of physicians throughout this country who have more than one good reason for opposing the Wagner-Murray-Dingell Bill. Your Observer feels certain, however, that the doctor to whom Dr. Stanley W. Insley, Editor of the *Detroit Medical News*, refers in a recent issue of his publication has no close competitor when it comes to arguments in favor of this legislation. He offers nineteen in all. They are as follows:

"I am lazy.
I could have a safe income.
I am sure I could fool some of the public into having my services.
I could work short hours.
I could work only occasional nights.
I could draw my pay regardless of my ability.
I could refer any serious cases to a specialist and let him worry.
I could hospitalize all my patients to save house calls.
I could set my own hours to work.
I could cut my overhead to nil as all I would need would be a thermometer and a prescription pad.
I could have my Sundays and holidays free.
I could pick my patients. No large families for me.
I could quit reading the *A. M. A. Journal*, and other long-winded magazines and books.
I could have a vacation every year without loss of practice.
I could retire at 65.
I could chisel a few extra dollars out of those that have money.
I could organize a ward political club to supply my congressman votes and free beer for myself.
Then maybe he could change the law so government would pay for a secretary for me like he has.
Then the secretary could be trained to do all the work.
What a life of Riley!"

Well, editors, like others, must have their fun.

CALENDAR OF MEETINGS

March 1	Business Meeting of Society
March 3	Procurement and Assignment Committee
March 6	Committee on Medical Care
March 8	Section on Pathology and Laboratory Medicine
March 9	Committee on Arrangements for Army-Navy Night
March 10	Interprofessional Conference
March 13	Grievance Committee
March 14	Committee on Medical Care
March 15	Scientific Meeting of Society
March 16	Section on Neurology and Psychiatry
March 18	Committee on Arrangements for Army-Navy Night
March 21	Committee on Arrangements, Annual Scientific Assembly
March 24	Army-Navy Night
March 25	Executive Board
March 29	Scientific Meeting of Society
March 31	Committee on Medical Care

MEETINGS

Wednesday, May 3

BUSINESS MEETING

"Economic Changes in Relation to Medicine," ROBERT MONTGOMERY, PH.D., Economic Adviser to the Executive Director of the Foreign Economic Administration; Professor of Economics, University of Texas (on leave of absence).

Wednesday, May 17

Program to be announced.

President's Page

WE AREN'T INFALLIBLE

In their ardor to preserve what is good in present-day medical practice some of our physicians place the medical profession in an embarrassing position. They would have the people believe that the A.M.A. and its affiliated organizations can do no wrong; that all who disagree with this view are meddlers and enemies of the medical profession. Of course, in their hearts they do not believe any such thing and it is unfortunate that they give this impression.

Organized medicine has made serious errors. For example, the A.M.A. was obviously several years late endorsing prepayment medical service plans. Now this was not the fault of any one individual but, in my opinion, was due in large part to the fact that physicians generally were not prepared to participate in any program which would to any degree regiment them. Whatever the reason, pressure of public and professional opinion became so great it could not be ignored.

The point which I wish to make is that we like other groups make mistakes, some of them grievous. There will be no public resentment on this score if we readily admit that we have made them. It is only when we attempt to prove that we have always been right that we justifiably arouse suspicions. Physicians, above all others, should not take such an untenable position.

Let us speak frankly about our successes and failures, our hopes and fears, and our plans and lack of them. No one expects us to be infallible. People of this country still look to the medical profession for guidance in matters of health. They recognize the splendid achievements to the credit of medical organizations. We must not disillusion them by insisting that we have attained perfection.

Fred R. Sanderson

War Section

INDUCTIONS AND PROMOTIONS

The following members of the Medical Society, not previously listed in the MEDICAL ANNALS, are in the services: William K. Billingsley, Jr., Ervin N. Chapman, Charles S. Coakley, George A. Resta, Raymond L. Schwartz, S. Hazen Shea, Philip H. Varner and Simon Weiner.

Information regarding further promotions in rank has come to the attention of Editors of the ANNALS. Congratulations are due the following members of the Society whose new ranks are as indicated:

Frank T. Cawley, from Captain to Major
Samuel Diener, from First Lieutenant to Captain
Max Feldman, from First Lieutenant to Captain
Herman S. Hoffman, from Lieutenant Commander to Commander
William A. Howard, from Captain to Major
William D. Jarman, from Captain to Major
Marshall deG. Ruffin, from Captain to Major
Isadore L. Sandler, from Lieutenant Commander to Commander
Raymond Schwartz, from First Lieutenant to Captain
Luther Snyder, from Major to Lieutenant Colonel

DISTRICT PROCUREMENT AND ASSIGNMENT COMMITTEE

PAUL F. DICKENS, M.D.

Chairman, District of Columbia Procurement and Assignment Service

Few physicians realize the tremendous responsibility assumed by the medical profession when it volunteered to coöperate with the Procurement and Assignment Service for Physicians of the War Manpower Commission. This vast undertaking was fraught with many unforeseen difficulties.

The Service was established on October 30, 1941. However, it was not prepared to function until early 1942. Its first Executive Officer was Major (later Lieutenant Colonel) Sam F. Seeley, M.C., U.S.A. He was succeeded by Commander Maxwell E. Lapham, U.S.N., who carried on until recently. Due to Commander Lapham's illness, Dr. Paul C. Barton is now Acting Executive Officer.

The Directing Board of Procurement and Assignment Service for Physicians is the same as it was in the beginning. The personnel of this board is as follows: Drs. Frank H. Lahey, Chairman, of Boston, Massachusetts; Harvey B. Stone of Baltimore, Maryland; James E. Paullin of Atlanta, Georgia; Harold S. Diehl of Minneapolis, Minnesota, and C. Willard Camalier of Washington, D. C.

The Service was established to assure a sufficient number of physicians for the armed forces and at the same time retain adequate personnel on the home front to care for civilian population.

At the beginning of hostilities, there were approximately 150,000 physicians in the United States. Since then about 42,000 doctors have been commissioned by the Army, and approximately 12,000 by the Navy. For the most part, these physicians were young, energetic and hard-working members of our profession. The older physicians had to be content to remain at home, although many were eager to and did enter the armed services.

As might have been expected, mistakes have been made by the Service. In some communities, too many physicians have been withdrawn for military duty and an insufficient number of physicians remain to care for the civilian population. This has been true for the most part in the isolated communities. In urban centers, the situation to date has not been acute in this regard.

The District Procurement and Assignment Service for Physicians began functioning under Dr. F. X. McGovern as State Chairman on January 26, 1942. Dr. McGovern served during a very difficult period for there was no precedent to guide him in setting up the necessary office procedures. He was provided a secretary, and records were prepared on which essential data were recorded about each physician in the District. An Advisory Committee was appointed by the Chairman to assist him in determining the availability and essentiality of the physicians in the District. Personally, I feel that a great deal of credit is due Dr. McGovern for his splendid service. I can vouch for the fact that his position was a thankless one, for I succeeded him on January 1, 1943. I continued his Advisory Committee, the personnel of which at the present time is as follows: Drs. F. X. McGovern, J. A. Gannon, Henry C. Macatee, Henry R. Schreiber, L. H. Reichelderfer, W. T. Davis, James A. Lyon, Casimir Leibell, A. M. MacDonald, Charles S. White, Colonel A. C. Gray and Dr. W. C. Goines, representing the Medico-Chirurgical Society of Washington. Mr. Theodore Wiprud is the Secretary of this Committee.

During the year I have been Chairman I have had many discussions with prospective medical officers. I have had to decide upon the availability of a considerable number of physicians for the armed forces, with the advice of my Advisory Committee. This has not always been a pleasant task. There are many factors which must be taken into account in judging the essentiality of a physician to a community. Until recently, age, marital status and the number of dependents under eighteen years of age were not considered. However, they are now determining factors along with the professional status of the physician.

Some of you may wonder why there are young physicians in private practice in Washington whom you believe should be in the Army or Navy. Most of these physicians have been found to be physically disqualified for military service. There are also a number of physicians in this age group who are essential in a teaching capacity to our medical schools, or as members of hospital medical staffs. Naturally, the physical or other reason for a physician's disqualification is a confidential matter.

In addition to the 16,000 students who would normally graduate within the next three years, an additional 5,000 will be graduated, making a total of 21,000 additional physicians, 80 per cent of whom will be made available to the military services. As a result of the increase in the number of medical graduates, and the reduced ratio of physicians required by the Army of 6.6 physicians per one thousand men in battle areas, and 4.4 physicians per one thousand in non-combat area zones, the situation, in so far as the armed forces is concerned, should soon be well in hand.

The Army still needs 6,000 additional officers this year to insure adequate medical care for the war casualties. The Navy will need approximately 2,000 doctors, not including recent medical graduates. From this it can be seen that additional physicians will have to be withdrawn from the District of Columbia for the armed forces.

Doctors who now enter the military services are being commissioned First Lieutenants in the Army or Lieutenants (junior grade) in the Navy. The base pay plus allowances is about $3,400 a year. However, both branches of the Service take into consideration special abilities which warrant advance in rank.

With military needs not satisfied, the picture in regard to medical care for civilians has not improved. The shortage of doctors in civilian practice is accentuated because the military commissions 80 per cent of all medical graduates, leaving only 20 per cent, or approximately 1,500 young physicians, annually for the home front. When the loss of some 3,000 older physicians due to death is considered, prospects for civilian medical care are not too bright for the duration of the war. However, here in the District of Columbia we are not losing sight of our obligation to see to it that adequate provisions are made to protect the health of the people.

I would be ungrateful if I did not mention the splendid service rendered by members of the Advisory Committee, and the assistance of the Secretary, Theodore Wiprud. Without their help and coöperation, I could not carry on.

On The Home Front

The Second "War Conference" on Industrial Medicine, Hygiene and Nursing will be held in St. Louis, Missouri, May 8–14, at the Hotel Jefferson. The participating organizations are the American Association of Industrial Physicians and Surgeons, American Industrial Hygiene Association, National Conference of Governmental Industrial Hygienists and American Association of Industrial Nurses.

The Council on Medical Service and Public Relations of the American Medical Association opened an office in the Columbia Medical Building at 1835 Eye Street, N.W. on April 4.

The American Library Association has established an office in Washington which is collecting scientific and technical periodicals so that a supply will be available after the war to libraries and research institutions in countries unable to receive them at present. A number of sets of current issues of medical journals are being purchased with funds made available by the Rockefeller Foundation, but gifts are wanted to supplement this supply and to provide back volumes to replace sets that have been destroyed.

Storage space is available at the Library of Congress. Physicians who have periodicals to donate should communicate with Miss Dorothy J. Comins, Executive Assistant to the Committee on Aid to Libraries in War Areas, Library of Congress Annex, Study 251, Washington 25, D. C., telephone National 2722, Extension 291. Arrangements will be made to pick up any material donated. Copies of the A. M. A. Journal and other medical and scientific periodicals are especially desired.

The theme of this year's **National Hospital Day,** May 12, as announced by Frank J. Walter, President of the American Hospital Association, will be "Hospitals in the Third War Year." The Association plans to emphasize the continuance of coöperative relations with government agencies; the study of postwar hospitalization needs; veterans' physical rehabilitation programs; and expanded facilities for an interchange of technical advances in hospital science.

The George Washington University Medical Society held its fifth meeting this year on March 18. Dr. Maurice Protas read a paper on "The Action of Globin Insulin Compared with that of Regular and Protamine Zinc Insulin." Discussion was led by Dr. Donald Searle, Medical Director of Burroughs Wellcome and Company and co-discoverer of globin insulin.

Dr. William DeKleine was appointed State Commissioner of Health of the State of Michigan, succeeding the late Dr. H. Allen Meyer, on February 14. The appointment was confirmed by the Michigan legislature on March 13. Dr. DeKleine, a native of Michigan, practiced in Grand Haven, Michigan, for eight years, then returned to the University of Michigan for postgraduate work. For two years he conducted a tuberculosis survey for the State Health Department. He served as health officer in Flint, Michigan, for five years and in Saginaw, Michigan, for three years. Dr. DeKleine moved to Washington in 1928 to become Medical Director of the American Red Cross, retiring from that position in September 1941. Since that time he has been engaged in the private practice of medicine with offices at 1835 Eye Street, N.W.

Additional appointments were made to the **Committee on Medical Care** by President Sanderson and confirmed by the Executive Board at its meeting, March 25. They are as follows: Drs. Arch L. Riddick, Henry C. Macatee and J. Lloyd Collins.

The new **Arlington County Hospital,** located at 16th and North Edison Streets, Arlington, Va., opened March 15. Mr. Charles Henry Dabbs, formerly Administrator of Tuomey Hospital, Sumter, S. C., succeeded Mr. Benjamin W. Wright as

Administrator of Arlington County Hospital, September 21, 1943.

The Prince Georges County General Hospital, Cheverly, Md., opened its doors for the first time, March 21.

Dr. Arnold McNitt has been appointed a member of the Council of the Southern Medical Association from the District of Columbia for a term of five years beginning in mid-November. Dr. McNitt succeeds **Dr. Oscar B. Hunter,** whose term will expire at the close of the Southern Medical Association meeting in November and who, having served the constitutional limit, is not eligible for reappointment.

Dr. Oscar B. Hunter participated in the Hospital Conferences held in connection with the War Session of the American College of Surgeons in Baltimore, March 24. His subject was "Maintaining Standards of Professional Services with Special Reference to Medical Records, Medical Staff Conferences, and Adjunct Diagnostic Services." Dr. Hunter also took part in the Dinner-Forum Session for physicians, surgeons and hospital representatives.

Dr. Edgar D. Griffin has been appointed to fill the position of Senior Medical Officer at St. Elizabeths Hospital, left vacant by the death of Dr. John E. Lind. Dr. Griffin received his degree in medicine from George Washington University School of Medicine in 1930. He is Associate in Psychiatry at George Washington University School of Medicine and a diplomate of the American Board of Psychiatry and Neurology. He has been a member of the staff of St. Elizabeths Hospital since 1930.

Dr. George C. Ruhland was reëlected Secretary and Treasurer of the Association of State and Territorial Health Officers during the recent meetings held in the Society's building at 1718 M Street, N.W. Dr. I. C. Riggin, Commissioner of Health for Virginia, was reëlected President, and Dr. R. L. Cleere of Denver, Vice President.

Dr. Ralph M. LeComte was elected Vice President of the Mid-Atlantic Section of the American Urological Association at its winter meeting in Roanoke, Va., March 11, 1944. Dr. C. H. deT. Shivers of Atlantic City was named President and Dr. Theodore R. Fetter, Philadelphia, Secretary-Treasurer.

Dr. Winfred Overholser addressed the Boston University Institute on postwar medical problems, March 11.

Colonel Daniel L. Borden, M.C., U.S.A., addressed the Norfolk County Medical Society, Norfolk, Va., March 20, on socialized medicine.

Dr. Norman M. Scott, Medical Director of the Medical-Surgical Plan of New Jersey, appeared before the Committee on Medical Care on March 14.

Dr. Edward Larkin has been reappointed to the Executive Committee of the District Chapter of the National Foundation for Infantile Paralysis, Inc.

(*Continued from page 150*)

which a case of rheumatic orchitis with postmortem findings was reported. Unfortunately, we could not locate the article, but we wish to acknowledge the reference.

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MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *May, 1944* NUMBER 5

"...BEYOND THE CALL OF DUTY"*

A. A. VANDEGRIFT

Lieutenant General, United States Marine Corps; The Commandant of the Marines

YOU may know that the name of your President is well represented in the Marine Corps by his brothers, Colonel C. R. Sanderson and Colonel R. O. Sanderson.

It is indeed a pleasure to have this opportunity to pay my respects to the wives, families, and friends of a corps of men for whom I have the greatest admiration, the medical men of the Army and the Navy.

Certainly this Society has every reason to be extremely proud of the service being rendered by its members to the armed forces. Never, I daresay, in the long and honorable history of the Society has its record of service to the Nation been more illustrious.

Strictly speaking, we have no medical men in the Marine Corps. Our own ranks are "doctorless." I believe a few of our most enthusiastic marines would like to say that that is because we are so tough we have no need of doctors. But, of course, that is a slight case of nonsense. We need a great deal of medical attention, and we get it. We get the best medical attention in the world.

Navy doctors and navy medical corpsmen serve with all Marine units overseas. Here in the States our men are treated at naval hospitals. Marines also have occasion, at times, to come under the excellent care of Army doctors in the field.

Ordinarily marines, just as men of the Army or Navy, like to feel an independence within their own ranks which calls for a minimum of help from outside the fold. But this is an exception. Our men are eminently satisfied with the system as it stands. Experience has given them a deep and abiding respect for Navy—and Army—doctors and they regard the Navy corpsmen as among the most heroic of their own kith and kin.

A patient came to one of our field hospitals with the complaint that he was unable to sleep at night, and the doctor advised him to eat something before going to bed. "But Doctor," the patient reminded him, "two months ago you told me never to eat anything before going to bed." The good doctor blinked, and then, in full professional dignity, replied, "My boy, that was two months ago. Science has made enormous strides since then."

Medical science has indeed made enormous strides in a relatively brief time prior to, and during, this war. The high percentage of lives saved among our wounded men has been as astounding as it has been gratifying to the American people.

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* An address given before the Society on Army-Navy Night, March 24, 1944. Honored guests on this occasion were wives and parents of Washington physicians in the armed forces.

Blood plasma, sulfa drugs, and quick evacuation of the wounded are widely and fervently praised as responsible, in great part, for the remarkable record in lifesaving that is being maintained.

But it should be remembered, and certainly is being remembered by those of us who have been out there, that the modern wonders of wartime medicine and surgery depend for their success upon the skill, courage and devotion of the men who use them.

I have seen our doctors in action at the front, and I can testify wholeheartedly to their skill, courage and devotion beyond the call of duty. Almost every marine, and soldier and sailor, who has been in any battle zone can say the same thing. Thousands of them can show you their healed and mended bodies to substantiate what they say. Thousands of them will tell you they owe their lives to doctors who, unarmed, braved enemy machine-gun and shell fire to carry them from the field, and who then gave them whatever immediate medical or surgical attention they needed, still under fire, with firm, steady fingers before sending them to the rear for evacuation.

In our first seven days on Bougainville, 115 wounded men were brought to what passed for a hospital, and of that number only 2 died. The Chief Surgeon said that he and his men conducted 24 major operations, and most, if not all, of those operated on would have died had they not been given immediate treatment there.

The operating room was a square, muddy dugout, three feet deep, with sandbags stacked around the edge, and a low covering tent overhead. This arrangement was kept as tightly sealed as possible in order that they might operate at night without the light from their flashlights showing outside. They wore helmets as they worked, because sniper bullets were whistling on all sides.

Those of us who have commanded troops in the field know that there are three essentials an officer must provide, at any cost, for his men when they go into action—food, ammunition, and the best possible protection. The last named is extremely important. When a man fights a good fight and is unfortunate enough to be hurt, he deserves quick and skillful medical care. Our medical units make it possible for us to promise our men that protection. And men who go into action with confidence that such protection is with them are much the better fighters for it. The medical units therefore contribute directly to the morale, the fighting spirit, of our troops even before the first bandage is applied.

I am a soldiering man, not a doctor, but I have noted many other impressive aspects of the medical service in the field, a few of the most interesting of which I should like to cite to you here.

I have observed that many physicians manage to maintain some semblance of back-home office habits in the heart of jungle islands. Offices and reception rooms are set up in tents; office hours are strictly announced, and not at all strictly kept, the doctors laboring long hours overtime, as back home.

I recall a doctor with an aviation squadron whose announced office hours were "dawn to dusk." Those hours were chosen, he said, because he always wanted to be on hand when his flyers took off, and when they returned.

The physicians battle far more than wounds. Daily they fight tropical diseases, as well as ordinary ailments that seem to crop up anywhere. In many places they inspect field kitchens, and in general act as sanitation commissioners.

I have noted with interest, and deep respect, the extreme lengths to which a doctor will go to assure cleanliness while treating the wounded. Even though he is beset by every obstacle to cleanliness one could possibly imagine, it remains his God, and he protects it religiously with soap and water, clean linen, and every makeshift sanitary device at his command. I have heard more than one doctor in the field say that judicious use of soap and water can often be the world's best substitute for surgery.

A special challenge faces our doctors, in that they must be doctors of the mind as well as the body. Of course, this is true of physicians at any time, but it is especially true of those handling men wounded at war. These men are, for the most part, young men—young men who have been changed in a split second from healthy, vigorous fighters into pain-ridden invalids, some of whom face a lifetime readjustment.

Our doctors have met that challenge as squarely as they have met all others. They have proved themselves to be men among men. I have read of a Navy doctor who was inspecting wounded marines just brought aboard his ship when one tall, rangy boy leaped out of bed and cried, "Doctor, tell me the truth. Am I going to go blind?"

The doctor regarded him suavely, and inquired, "How did you know I was the doctor?"

The boy stammered, and the doctor continued, "You could see me, couldn't you?"

The boy rocked on his feet; then he continued persistently, "Out of only one eye, though. And the other one is getting dim. I've heard of it happening before. One eye goes bad, and then the other one blacks out. I can't afford to go blind, Doctor. I can't afford to go blind."

The doctor pushed him gently back on his bunk, and said, "Let me take a look." He stripped off the eye patch and swabbed the eye with boric acid. The boy's lips trembled. He seemed ready to cry. The doctor took him firmly by the shoulders, saying, "Now listen, son. Don't you know you have the best doctors in the world looking after you? Do you think when you get back to base you'll have some punk from podunk taking care of you? You'll have the best darn eye specialist in America working on you. And I just gave him a head start. Now cut it out or I'll drop you over the side."

The boy stared at the doctor, caught by the firmness of his voice. Then he seemed to relax all over. He grinned wearily, and said, "I'm sorry, Doctor. I guess a lot of fellows got it worse than I did." And he lay back and went to sleep.

Not only at front-line aid stations, but at rear hospitals, hospitals aboard ship, base hospitals, and at hospitals and research laboratories throughout this country, the doctors of the Nation are winning the lifelong gratitude of the millions of families represented in the armed forces. The appreciation of soldier and civilian alike goes as well to the physicians on whom the burden falls of maintaining vigilance over the health of our people at home.

In the new world of peace, this great and valiant profession will stand even higher on the American scroll of honor than ever before.

Metric system adopted. "Attention is called to the announcement elsewhere in this issue that future editions of New and Nonofficial Remedies, Useful Drugs, the Epitome of the U. S. Pharmacopeia and National Formulary and Interns' Manual (with the consent of the Council on Medical Education and Hospitals [of the American Medical Association]) as well as other Council publications, will give quantities and dosages exclusively in the metric system," *The Journal* of the Association says in its December 4, 1943 issue. "This step is in harmony with the growing and current practice of prescribing vitamins, hormones and sulfonamide preparations. The Council's concise historical presentation of the units of measure formerly in common use emphasizes the value of adopting a uniform method of presenting quantities and dosages. While daily living may have been governed for many years by grains and barley corns, the kingly nose and regal thumb, and the combined length of the left feet of 'sixteen men who lined up heel to toe as they left church on a Sunday morning,' workers in the exact sciences appreciate the value of the simplicity, convenience and precision of the metric system. Universal adoption of this system will be a manifestation of rationality and of interprofessional and international coöperation of great practical utility."

CORRECTIBLE DEFECTS AT SELECTIVE SERVICE AGE*

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THIS meeting deals with one of the most important national problems; in general, the health of the Nation, and more specifically, with the correctible defects from infancy on to military age. This symposium is timely, the subject aptly chosen, and the sequence of papers revealing. The cumulative nature of this health problem, the increasing size of the 4-F pool during the last three and a half years, the increase of defects in relation to increasing age, are all mirrored in the statistics of the Selective Service System. Never before has the national picture been so well defined, never in the past has the national need for action been so evident. With a clear picture of the needs before us, we now face a crucial question: What can we do about it?

The adjective "correctible" is an important one. Elastic as it is, it constitutes a real challenge to us in medicine and also to the American people.

As medical men we are accustomed, in dealing with medical problems, to apply our own concepts of disease and of treatment. Under ordinary conditions, in dealing with a remediable disease the correction of the defect by medical or surgical measures represents a relatively simple problem. As a rule, the cure is easy. However, the problem we face today is not so simple. It is infinitely larger and more complex. It involves the cure of correctible defects in millions of victims of disease scattered throughout the length and breadth of the land. This handling of this tremendous backlog of disease represents more than a medical problem. It is a national problem. Its solution involves national coöperation and support. Medicine is competent to make the diagnoses and outline the treatment indicated. The patient, however, is not an individual in this instance; it is the Nation. Does the Nation recognize the need for treatment? Is the Nation seeking relief and will it seek to help itself? Without its full participation, but little can be accomplished. Medicine can diagnose and advise. The real problem, however, is conversion of advice into the actual management of the Nation's accumulated pool of illnesses.

EARLY STATUS OF THE REHABILITATION PROBLEM

The national need for rehabilitation was recognized early by President Roosevelt, even before the advent of the War. A survey conducted by Selective Service in 1941 revealed that of the first 2 million registrants examined, 1 million, or 50 per cent, were rejected as physically or mentally unfit for service. In October of that year, the President, keenly aware of the significance of these statistics on rejections, took steps to determine the possibility of rehabilitating certain groups of rejectees for service in the military forces. Calling a conference of those concerned with this problem at the White House on October 9, 1941, he indicated his wish that Selective Service rehabilitate 200,000 men, the rehabilitation to be carried out by the family doctors and dentists in the registrant's home town, selecting only such cases as could be rehabilitated in a reasonable time and at a reasonable cost, for which, he said, funds would be available. These instructions were verbal.

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* Read before the Society, January 26, 1944.

A conference was immediately called at National Headquarters of the Selective Service System, to which were invited representatives of the outstanding medical and dental organizations of the country, to plan a rehabilitation program. At this meeting discussion centered finally on two problems: (1) certification of the competency of physicians and dentists for specific purposes, and (2) the surgical risks involved in the physical rehabilitation of those in need of operative procedure.

In due time the Executive Order was issued and the funds were made available for the carrying out of this plan. Due consideration was accorded all the legal, financial and governmental angles involved, as the problem ceased to be one purely of medical management and became one of considerably greater complexity. The initial plans of Selective Service were entirely changed by the attack on Pearl Harbor and the Declaration of War. Prior to that time it seemed feasible to rehabilitate 200,000 of these registrants without resorting to surgery, but after Pearl Harbor, the increased need for men for the armed forces became so imperative as to necessitate lowering of the standards for admission to the armed forces. Urgency of need prevailed. Minor defects scheduled for rehabilitation were waived. The original group scheduled for rehabilitation became acceptable to the Army in status quo and without undergoing rehabilitation of any kind.

Nevertheless, pilot tests already planned were carried out in the States of Virginia and Maryland between February and June, 1942. These operated on a limited scale, involving no surgical but only medical and dental cases. In June of that year the Director, after appraising the results of the test and bearing in mind the greatly altered picture, decided that the results of the limited pilot test did not justify general adoption of the rehabilitation program on a nationwide basis, so far as Selective Service was concerned.

During the interim the War Manpower Commission had been created by the President to coördinate all matters pertaining to manpower. The rehabilitation program was referred to them by General Hershey for consideration and action.

While little actual rehabilitation was accomplished, much was learned as to the difficulties of such a program. A system of selection of medical personnel applicable in every State was created involving the appointment of designated physicians and dentists. The Veterans' Administration schedule of fees was used as a basis in the matter of remuneration for professional services. Thus a model was produced capable of meeting the national need.

The defects listed as correctible by the office of the Surgeon General include the following:

Uncinariasis, if severe.

Chronic blepharitis, if mild.

Pterygium encroaching on the cornea.

Conjunctivitis, chronic, simple, moderate.

Deviation of the nasal septum which definitely interferes with nasal breathing.

Nasal polypi, unless severe and irremediable.

Such conditions as chronic diseases of the skin of the type which disqualify for general military service, provided the individual has successfully followed a useful vocation in civil life.

Pilonidal cyst or sinus.

Ringworm, if very severe and not easily remediable.

Scabies, if very severe and not easily remediable.

Cysts and benign tumors of the skin of such size and/or location as to interfere with normal wearing of military equipment.

Hammer-toe with rigidity.

Other abnormalities which, in the opinion of the examining physician, are disqualifying but remediable and which have not prevented the individual from following a useful vocation in civil life.

Simple goiter unassociated with toxic pressure symptoms, enlarged lymph nodes and benign tumors of the neck if the enlargement is of such degree as to interfere with wearing of a uniform or military equipment.

Simple adenomatous goiter.

Thyrolingual cyst.

Small fibroid lesions.

Foreign body in the lung. A person may be accepted after a foreign body has been removed from a bronchus, provided examination shows recovery without disqualifying sequelae.

Benign tumors of the breast or of the chest wall of such size and location as to interfere with the wearing of the uniform or military equipment.

Hernia, inguinal, femoral, umbilical or postoperative, if remediable by surgical treatment.

Large benign tumors of the abdominal wall.

Internal and external hemorrhoids, moderately severe, if remediable.

Single fistula in ano if careful examination excludes the presence of tuberculosis.

Stricture of the urethra unless severe and irremediable.

Cystitis, subacute, if deemed remediable.

Varicocele, if large.

Hydrocele, if large.

Undescended testicle which lies within the inguinal canal.

Venereal diseases. Cases of gonorrhea with complications, chancroid infection, granuloma inguinale and lymphogranuloma venereum.

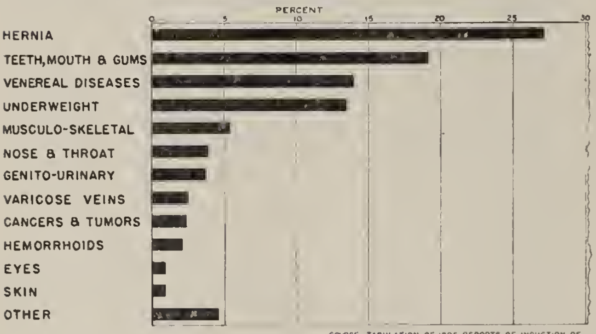
Pellagra, beriberi, scurvy and other nutritional deficiencies, if mild and remediable by correction of diet.

Simple goiter with definite pressure symptoms or so large as to interfere with wearing a uniform or military equipment.

Malaria, acute, severe; or malaria, chronic, unless severe.

CHART 1

PROPORTION OF REJECTED REGISTRANTS WITH CORRECTABLE DEFECTS
BY TYPE OF DEFECT



SOURCE TABULATION OF 1896 REPORTS OF INDUCTION OF SELECTIVE SERVICE MAN, WD., AGO, FORM 221, FOR REGISTRANTS WITH CORRECTABLE DEFECTS

R & S DIV (MED SEC) 7-1-42

Reliable statistics on remediable diseases are not readily available. Perhaps our best data are those of October 1941 to March 1942. It is restricted, however, to diseases correctible for service in the armed forces, as determined by physicians at the induction stations. The proportions of rejected registrants with correctible defects by type of defect is shown in chart 1, their distribution by states in table 1.

TABLE 1

Number and percentage of registrants rejected by army induction stations with correctible defects, October 1941 through March 1942, by state

STATE	REGISTRANTS REJECTED BY ARMY INDUCTION STATIONS BETWEEN OCT. 1, 1941 AND MAR. 31, 1942	REGISTRANTS REJECTED BY ARMY INDUCTION STATIONS BETWEEN OCT. 15, 1941 AND MAR. 31, 1942 WITH CORRECTIBLE DEFECTS	PERCENTAGE OF REJECTED REGISTRANTS WITH CORRECTIBLE DEFECTS
United States	342,455	75,931	22.2
Alabama	9,303	1,662	17.9
Arizona	846	324	38.3
Arkansas	4,429	1,566	35.5
California	12,176	4,040	33.2
Colorado	2,272	897	39.5
Connecticut	1,787	1,059	59.2
Delaware	440	50	11.4
District of Columbia	1,678	125	7.4
Florida	5,009	1,524	30.4
Georgia	8,045	4,639	57.7
Idaho	1,014	196	19.3
Illinois	17,301	4,482	25.9
Indiana	9,018	775	8.6
Iowa	4,091	558	13.6
Kansas	2,892	747	25.8
Kentucky	6,513	1,299	19.9
Louisiana	7,154	2,145	30.0
Maine	1,207	367	30.4
Maryland	2,338	107	4.6
Massachusetts	11,860	671	5.7
Michigan	14,177	2,300	16.2
Minnesota	6,648	969	14.6
Mississippi	4,117	2,411	58.6
Missouri	6,684	1,959	29.3
Montana	1,661	230	13.8
Nebraska	3,020	897	29.7
Nevada	327	108	33.0
New Hampshire	1,110	628	56.6
New Jersey	11,303	—	—
New Mexico	1,332	494	37.1
New York	40,165	9,289	23.1
North Carolina	9,632	1,850	19.2
North Dakota	1,591	234	14.7
Ohio	22,824	3,552	15.6
Oklahoma	6,718	1,798	26.8
Oregon	3,435	717	20.9
Pennsylvania	41,553	9,271	22.3
Rhode Island	1,471	—	—
South Carolina	5,290	1,459	27.5
South Dakota	1,976	210	10.6
Tennessee	5,776	1,043	18.1
Texas	21,033	4,427	21.0
Utah	1,062	324	30.5
Vermont	749	238	31.8
Virginia	5,214	1,959	37.6

Washington......	3,173	1,078	34.0
West Virginia.....	5,936	953	16.1
Wisconsin........	4,627	126	27.2
Wyoming........	478	174	36.4

R & S Div. (Med. Sec.) 7-1-42

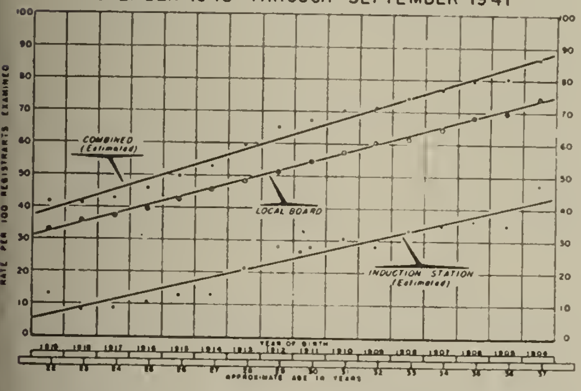
It is of interest that the first three defects listed, hernia, dental defects and venereal diseases, account for approximately 65 per cent of those regarded as correctible. All three are now undergoing remedy within the military establishment. It is also of interest to note that illiteracy is not included in these data.

This perhaps furnishes a fair insight into the problem of correctible diseases prior to the Declaration of War and up until March 1942.

Something should be said of subsequent developments and of the present situation relative to correctible diseases, of changes in standards for admission to the fighting forces, and in the age limits.

CHART 2

REJECTION RATES IN RELATION TO AGE
NOVEMBER 1940 THROUGH SEPTEMBER 1941



Toward the end of 1942 the age limit was lowered to 18. At one period the upper limit reached 45 years of age and was finally fixed at 38. It has been possible therefore to determine the influence of age on the rates of rejection. It would appear that the rejection rate is almost a linear function of advancing years, as seen in chart 2 covering ages from 20 to 36. The figures as to the incidence of correctible diseases in relation to age are not yet available.

The Present Situation Relative to Correctible Diseases

Examination for military service has been continuous though attended by adjustments in standards and changes in examination procedures. National rejection rates have varied considerably from time to time especially in that

TABLE 2

Estimated principal causes for rejection of registrants 18-37 years of age in Class 4-F, as of January 1, 1944 (Preliminary)

PRINCIPAL CAUSE FOR REJECTION	NUMBER	PER CENT
Total	3,437,000	100.0
Manifestly disqualifying defects	361,200	10.5
Educational deficiency*	358,100	10.4
Physical and mental defects	2,679,500	78.0
Mental disease	497,800	14.5
Syphilis	312,900	9.1
Musculoskeletal	252,800	7.4
Cardiovascular	219,200	6.4
Hernia	202,400	5.9
Neurological	186,100	5.4
Eyes	182,000	5.3
Ears	131,700	3.8
Mental deficiency*	114,100	3.3
Tuberculosis	89,100	2.6
Underweight, overweight and other	68,600	2.0
Lungs	56,500	1.7
Feet	40,500	1.2
Abdominal viscera	39,300	1.1
Kidney and urinary	35,600	1.0
Teeth	34,900	1.0
Genitalia	34,600	1.0
Varicose veins	34,400	1.0
Endocrine	34,000	1.0
Nose	21,600	0.6
Neoplasms	21,000	0.6
Skin	20,700	0.6
Gonorrhea and other venereal	16,000	0.5
Hemorrhoids	13,600	0.4
Mouth and gums	9,900	0.3
Throat	3,400	0.1
Blood and blood-forming	3,400	0.1
Infectious and parasitic	3,400	0.1
Non-medical	38,200	1.1

* Includes registrants who failed to meet minimum intelligence standards from June 1, 1943 on. Some of these registrants have been reported as educationally deficient, others as mentally deficient.

R & S (M) 1-1-44. Source: Forms 110, 111, 140 and 221.

period when the induction of teen-age registrants was at its peak. In that period the rejection rate dropped to the neighborhood of 30 per cent, but despite lowered standards and the lowering of the age limit it has gradually climbed back until it is now above 45 per cent.

At present, the pool (4-F) of rejected men is large. The total number and the breakdown as of January 1, 1944 is revealed in table 2.

For completion of the picture, in addition to rejectees, there should be included those who entered service and have since been discharged on a Certificate for Disability Discharge. This totals in all to some 428,000 as of January 17, 1944.

It would seem therefore that the total number discarded by rejection or discharge is 3,865,000 or approximately 4,000,000 men. It is pertinent to ask what proportion of these men are suffering from correctible diseases and what is being done in the way of rehabilitation.

Correctible diseases are found in the 4-F pool and, to a much lesser extent, among the men discharged from service. They may be classified, from the standpoint of approach to treatment, into certain groups. The problems of literacy and venereal disease involve education. Surgery is indicated in large numbers of cases but it raises questions of compulsion and of surgical risk.

Remediable defects or diseases may be grouped as follows:

1. Those remediable by education
   (a) illiteracy
   (b) stuttering and stammering
   (c) venereal disease (prevention)
2. Self-limited conditions, or those under treatment
   (a) acute illness or disease
   (b) recent trauma
   (c) immaturity
3. Those remediable by surgery
   (a) thyroid
   (b) fistulae and cysts and sinuses
   (c) eyes:
      strabismus
      adhesions, etc.
   (d) hernia
   (e) hemorrhoids
   (f) varicose veins
   (g) undescended testicles
   (h) nasal deformities
   (i) scars and adhesions
   (j) contractures of muscles—tendons
4. Those remediable by medical physiotherapy, general measures, etc.
   (a) venereal disease
   (b) skin diseases
   (c) glasses, for vision
   (d) dental
   (e) weight, over or under

CURRENT HANDLING OF CORRECTIBLE DISEASES

No doubt some remediable measures are being employed everywhere throughout the Nation but in a desultory and patchy manner. Prehabilitation has been preached constantly by Selective Service and preinduction correction of defects has been undertaken in a number of places. Localized efforts of considerable value have been instituted in many places, notably in New York City under the auspices of the State Selective Service Headquarters, and by the American Flying Services Foundation, and in New Jersey under the auspices of the New Jersey Rehabilitation Commission. Doubtless much has been accomplished also through the efforts of the educational system of the country and of the National Committee on Physical Fitness. Effective, however, as these efforts are, in a large sense they have failed to solve the problem of rehabilitation.

TABLE 3

*Summary of professional services of the entire Army Dental Corps for the year 1942**

Number of cases admitted for treatment	4,319,506
Number of sittings	13,009,292
Number of root fillings	8,688
Number of permanent fillings	7,830,688
Number of bridges constructed	11,405
Number of crowns constructed	6,331
Number of bridges and crowns repaired	16,685
Number of dentures constructed	145,899
Number of dentures repaired	40,527
Number of prophylactic treatments	997,447
Number of extractions	3,302,781

* Official release from War Department; taken from the *Journal of the Michigan State Dental Society*, Vol. 25, No. 8, August, 1943.

Because of failure on the part of others, the military authorities have been compelled to shoulder the burden themselves. Only where they have taken over the problem has it been adequately handled in a large way. Some of these experiences are worthy of record.

Dental Defects. So long as the dental standards were being maintained, dental defects accounted for the largest number of rejections. When the standards were lowered, dental defects were waived and the victims of dental defects were inducted and treated within the military establishment. The magnitude of the problem is revealed in table 3.

Illiteracy. Illiteracy, while not strictly speaking a medical problem, is to say the least a close relative of disease. Illiteracy and certain types of physical and mental defects seem to travel together hand in hand in families. The extent of illiteracy among Selective Service registrants astonishes the uninformed. It should not, however, do so now, since the 1940 census showed 10 million persons 25 years of age and over with less than 5 years of schooling. Of these, 2,800,000 had no schooling at all, according to the Bureau of the Census Report of April 23, 1942. This includes all those who could not even write their own names. It is reflected in the first Selective Service registration, when 360,000 had to sign their registration cards with a mark.

Illiteracy has been divided into two categories, sheer illiteracy and functional illiteracy. Sheer illiteracy means inability to read and write anything, even one's name. Functional illiteracy is less than the skill usually thought of as that being possessed by a normal child who has had 4 years of schooling. It is less skill than has been considered the minimum necessary for performance as a soldier in modern warfare.

Why, one may ask, could this situation develop here in America? There are two principal causes, social and economic. Society has not insisted upon the removal of illiteracy. Finances have not been made available to raise the general education to an adequate level.

Much of the present trouble is due to lack of knowledge on the part of those who are literate. Too few know, for instance, that there are in this country three times as many illiterates as there are college graduates. Few know, for example, that as far as formal education is concerned, as much as 5 per cent of the population over 25 years of age in some midwestern and western states usually regarded as having a high degree of literacy have completed less than 5 years. Few know that 358,000 persons in California have completed less than 5 years' schooling, 462,000 in Illinois, and 696,000 in Pennsylvania, while New York leads the list with more than a million.

With Army peacetime standards of illiteracy, 100,000 were rejected of the first 2 million men examined. In the first 4 months, after establishing the standard at the 4th grade level, 142,000 were rejected as functionally illiterate.

Finally, the Army began to accept a limited number of illiterates. Though pilot tests in communities indicated that illiterates could quickly be brought up to the desired standards if they attended classes, funds were not forthcoming for support of this work outside of the fighting forces. There exist no state or federal laws or regulations that require registrants to become educated. All plans suggested to date to have local communities attack this problem at local expense have lacked the essential feature of compulsion. So here again the country has turned to the armed forces for a solution of this problem, at least so far as the Army needs are concerned. As of September of this year the number of illiterates in the 4-F pool is in excess of 340,000 despite all that has been done to date.

Venereal Disease. Venereal diseases have constituted another serious problem. The treatment of both syphilis and gonorrhea has reached a peak in effectiveness heretofore undreamed of. Despite this, the 4-F pool of men with venereal diseases has been substantial since the beginning of Selective Service. In this connection the U. S. Public Health Service has done splendid work both in revealing the prevalence of syphilis (4.5 per cent incidence of positive serology) and in the treatment of cases coming under their supervision. Medical men everywhere throughout the country have given treatment to registrants presenting themselves for cure. Despite this, as of January 1, 1944, local boards had found that half a million registrants when examined were found to have some type of venereal disease.

Here again the same pattern has developed; the armed forces were compelled to grant waivers and accept cases with venereal disease to the extent permitted by their facilities to handle them. In the last few months, through induction of men with venereal diseases, the pool has been decreasing in size; the backlog of syphilis among whites particularly has diminished remarkably. There were, however, as of November 1, 1943 more than 340,000 registrants with venereal disease in the 4-F group.

Hernia. The solution of the hernia problem follows the same pattern. Hernia is in a somewhat different category, since it involves surgical intervention and surgical risk. Compulsion is largely lacking. Rejections for hernia are known to be in excess of 200,000. Because of the large numbers concerned and the need for manpower, the military authorities were compelled to accept inguinal hernias provided they had not descended into the scrotum. After induction the majority of men are used for limited service but some are subjected to operation. As of November 1, 1943, there were still approximately 200,000 registrants with hernias left in the 4-F class.

Nervous and Mental Diseases. Still another subject should be mentioned, that of the nervous and mental diseases. This constitutes our most serious problem. To date there have been more than 800,000 rejected for military service and 148,000 discharged from the fighting forces because of mental disease and mental deficiency. To what extent it is correctible is difficult to determine. Since more than half of the Nation's beds are devoted to this problem, it is obvious that the problem has not been solved in civil life. It calls for the combined efforts of medicine, education and the home, and for preventive measures as well as curative.

Many facts about the general welfare of the citizenship of the country are, at all times, known to a small group of persons; however, it takes a major national crisis, such as this war, to bring these facts before the public generally, and even then society is not sufficiently shocked to take adequate corrective action. Hence, the burden of rehabilitation has been foisted on to the armed forces in a time when all of its efforts should be directed to the problem of actual warfare.

THE PROBLEM OF NATIONAL REHABILITATION

Let us consider the national picture. To date more than 13 million men have been examined and approximately 4 million have been discarded, rejected or discharged. This picture concerns young males and represents roughly 10 per cent of the population. Naturally, the question arises: Do defects abound in the other 9 levels of the population as in the one tenth? If so, there are at present some 35 to 40 million people in this country with defects which would disqualify them for service in the armed forces.

This raises the question of national rehabilitation. The Utopian solution of the problem would involve the correction, so far as possible, of all remediable disabilities, and the prevention of all defects, deficiencies, disorders and diseases. This at present may be considered idealistic. However, realistically this project would be of herculean proportions and one altogether impossible of attainment under the existing conditions of war.

The winning of the War is now and must continue to be our sole objective until victory is achieved. Consequently, the scope of any rehabilitation program now or at this time should be determined by war needs. It should be remembered, however, that the success of a nation is determined not only by the might of its arms but also by the might and productivity of its people. The military establishment is covering its responsibility, through careful selection of men for service, through rehabilitation of selected groups, and by rendering adequate medical and dental care in the field and by discharging those who are unfit.

In contrast, industry is absorbing the unfit, the rejectees, and those discharged from service. In all, industry has taken more than 4 million to date of the 13 million examined. Industry and labor now have the problem. One of the greatest tragedies is society's failure to deal with the health problems of youth. Youth is being permitted to go on in the even tenor of its ways, with full knowledge on the part of society that 1 out of 4 will fail to meet the military requirements when called to the colors. It is hoped this symposium will have some influence in this connection.

What is the answer? Experience has demonstrated society's incapacity and failure to solve the problem of correctible diseases. Because of the compelling need for manpower, the military establishment has found it expedient to assume responsibilities for leadership in rehabilitation and the cure of most of our correctible defects. This is not as it should be. The Nation should prehabilitate, do something to meet the challenge!

CONCLUSIONS

1. The present health situation in the Nation is unsatisfactory from the standpoint of procurement of manpower for the fighting forces and, to a lesser extent, for industry.

2. In order to meet their manpower needs, the armed forces in the midst of war have been compelled to shoulder the burden for the remedy of correctible defects of those accepted for military service.

3. Though this country has elected to become the arsenal of democracy, large numbers of defectives, now numbering some four million, are denied military service, and are being turned over to labor and industry without adequate provision for the care of their correctible defects.

Finds convalescent serum may be useful in treating measles. Convalescent measles serum may be useful not only as a complete protection against the disease but also as a means of treatment, NIELS DUNGAL, M.D., Iceland, advises *The Journal of the American Medical Association* for May 6, 1944, in a report of the results from use of convalescent serum during an epidemic of measles in Iceland in 1943. The report comes from the Department of Pathology and Bacteriology, University of Iceland, Reykjavik. Convalescent serum is obtained from persons who have recovered from the disease.

Dr. Dungal says that "Convalescent serum is useful in two ways against measles: On the one hand, it may be applied to effect a complete protection against the disease, and, on the other, it may be used to alter the course of the disease in the following manner: prolongation of incubation period, milder symptoms, lower fever, shorter illness, less complications and a corresponding quicker recovery. Some people want their children to contract measles, as it is usually more desirable to have the disease in childhood than to have to expect it some time later in life, when time is more precious. In order to effect a milder course of the disease the normal procedure should be to bring the child into contact with an infectious patient and give serum six to eight days later. If an adequate dose is given, the child will in all probability get a slight attack of measles yet sufficient to confer a lifelong immunity.

"In some cases complete protection will always be indicated, particularly for patients suffering from tuberculosis or other diseases where an addition of measles must be considered as a dangerous complication.

"A therapeutic use of convalescent serum may come into consideration, particularly during the first days of illness, when the disease has an alarming start, especially in patients with weakened resistance."

Of 203 persons who were given convalescent serum, Dr. Dungal says, "139, or 70 per cent, remained symptom free. Most of the others got the disease in a considerably milder degree than those not protected. The duration of the protection afforded by serum may last as long as thirty-six days at least. . . ."

PULMONARY EMBOLISM AND INFARCTION*

A Clinical and Postmortem Study of Fifty Cases

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INCIDENCE

HEMORRHAGIC infarcts of the lung were reported by Belt[1] in 7.8 per cent of consecutive autopsies and pulmonary embolism and pulmonary infarction in 9 per cent of autopsies by Hampton and Castleman.[2] Pulmonary infarction was seen in 5.2 per cent of autopsies reviewed by Krause and Chester,[3] and in half of these cases the infarction was considered to be the major cause of death or an important contributory factor. Collins[4] reported that pulmonary embolism was responsible for death in 2.07 per cent of the cases studied by him.

Barnes[5] has stated that "approximately 34,000 people die of pulmonary embolism yearly in the United States. If such a percentage of deaths from pulmonary embolism is applicable to the general population and unless this expectancy can be modified by effective treatment, it may be assumed that more than 3,000,000 people now living in this country eventually will die of pulmonary embolism."

Although the incidence of pulmonary embolism as determined by autopsy material is high, clinically it is not a frequent complication following general surgical procedures or in general medical cases. For example, in 172,888 postoperative patients at the Mayo Clinic[6] pulmonary embolism occured in only 0.5 per cent. An important reason for the difference in incidence of these conditions in autopsy versus clinical series is the preponderance of predisposing causes for pulmonary embolism and infarction in the patients who were studied postmortem. It is worthy of emphasis that pulmonary embolism and pulmonary infarction occur frequently in medical as well as in surgical cases. Hampton and Castleman[2] in their series of autopsied cases found that 60 per cent of the cases of pulmonary embolism and pulmonary infarction occurred in nonsurgical patients, half of whom had important heart disease. The most frequent occurrence in medical cases was in patients with heart disease.

To determine the frequency of occurrence of the common clinical evidences of pulmonary embolism and infarction, we have studied 50 patients who at autopsy were found to have pulmonary embolism and infarction, and on whom reliable data were available. Nearly all of the patients were studied clinically by one or both of us. In approximately one third of the cases, the pulmonary lesion was the immediate cause of death or at least an important contributory factor. These cases constituted 9 per cent of the deaths at Gallinger Municipal Hospital during the period of the study.

CLINICAL MANIFESTATIONS

Massive pulmonary embolism which usually causes death immediately or within 24 hours is not often encountered, and the clinical picture of pulmonary infarction as described in many medical textbooks is rarely seen. Great stress has been laid on the sudden onset of chest pain, hemoptysis, dyspnea, cyanosis and shock, with the subsequent observation of pleural friction rub and pulmonary consolidation. When such events occur the embolus has usually obstructed a fairly large branch of the pulmonary artery, and diagnosis is not difficult. When small pulmonary emboli occur, frank evidence of their presence is usually absent, and cardiac or inflammatory pulmonary disease may be erroneously suspected. This is especially true when no obvious source for the embolism is found and also when the embolism occurs in the presence of congestive heart failure.

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Pulmonary infarction should be suspected during periodic unexplained episodes of faintness, dyspnea or prostration.[7] We have found fever (often slight), tachycardia, and/or leukocytosis to be the most common manifestations of pulmonary infarction and at times the only clues to its presence. It was observed that the temperature and pulse curve took an abrupt rise in 60 per cent of our cases, and if the cases of sudden death were excluded a temperature rise occurred in 85 per cent. Fever and tachycardia were the only indications of infarction in 40 per cent of this latter group. The average increase in temperature was 3°F., with extremes of 1.5°F. and 5.5°F. The pulse rate increased 25 beats per minute, with extremes of 10 to 60. If more attention were paid to these factors, pulmonary infarction would be less commonly overlooked. This is especially true in pulmonary infarction complicating congestive heart failure, when its occurrence is frequently unsuspected, or bronchopneumonia incorrectly considered to be the cause of the fever.

Kinsey and White[8] demonstrated some underlying complication responsible for fever over 1°F. in congestive heart failure, and concluded that fever is rarely found in uncomplicated congestive heart failure. The 4 most common complications observed by them were, in order of frequency, pulmonary infarction, pulmonary infection (especially bronchopneumonia), active rheumatic fever, and myocardial infarction. It can therefore be seen that fever in a patient with congestive heart failure indicates a complicating condition, and pulmonary infarction should always be considered. Oral temperatures in patients who are dyspneic are inaccurate because of the occurrence of mouth breathing and the resulting cooling of the mucous membranes of the mouth.[8]

The white blood cell count was elevated above the previous determinations in 56 per cent of the cases in which it was done at the time of the febrile response. The range of the leukocyte count was from 11,000 to 26,000.

Hemoptysis, often repeated and with the sputum bright red or streaked with blood, was found in only 13 per cent of our cases. The relative infrequency of this finding serves to emphasize the danger of insisting upon its presence before establishing a diagnosis of pulmonary infarction, although it is true that with large pulmonary infarcts hemoptysis is a common finding. Cough unaccompanied by blood spitting occurred too infrequently in our series (2 cases) to be of any diagnostic value.

Pulmonary infarcts are located peripherally and involve the visceral pleura, often causing a pleural reaction which is responsible for pain. The pleural reaction may be of such a degree as to result in an effusion. Pain, pleuritic in character, was present in 17 per cent of our cases, and was associated with a pleural friction rub in 8 per cent. The relationship between pleural effusion and pulmonary infarction is difficult to evaluate, for in most of the cases in which there was pleural effusion and infarction there was also heart failure, in itself a more likely cause for effusion. However, in 10 per cent of the cases it seemed certain that the infarction alone was the cause of the pleural effusion. The criteria we used to demonstrate a causal relationship consisted of (a) the appearance of the effusion soon after the infarct occurred, (b) the absence of any other reason for effusion, and (c) a serosanguineous or sanguineous effusion or the presence of bile pigments in the fluid. Pleural fluid caused by heart failure is a transudate, and it is unusual for it to be bloody or to contain bile pigments. However, the pleural effusion in most cases of pulmonary infarction is serous. It has often been noted that pleurisy with effusion in cases of heart failure is usually right-sided. The presence, therefore, of a left-sided effusion in a patient with congestive heart failure should stimulate a search for pulmonary infarction.

In addition to the pleuritic pain of pulmonary infarction one occasionally observes substernal pain resembling angina pectoris. Such pain may in fact be true angina, in the sense that it is a manifestation of a disproportion between the myocardial demand for blood and the amount available. In the cases in which this type of pain is seen there is usually evidence of coëxisting cardiac hypertrophy and/or coronary artery sclerosis. Thus, in patients with coronary artery disease the anoxemia and lowered blood pressure that may be associated with pulmonary embolism plus an increase in the work of the right ventricle will decrease the already reduced oxygen supply to the myocardium and result in angina pectoris or even myocardial infarction.[9] Another reason for the decrease in coronary circulation and consequent angina pectoris in patients with pulmonary embolism is found in the increase in pressure in the right side of the heart. As a result of this increase in pressure the venous return from the wall of the right ventricle which empties into the right ventricle by way of the Thebesian veins is reduced. This results in a decrease in the coronary blood flow to the right side of the heart.[9, 10] Furthermore, the increase in right auricular pressure reduces the venous return by way of the coronary veins as well, and thereby diminishes coronary blood flow. Scherf and Schönbrunner[11] have postulated a pulmono-coronary reflex causing a decrease in the coronary blood flow. This reflex coronary artery spasm, thought to be under vagal influence, has not been definitely proved.

Pulmonary infarction may be mistaken for heart failure by producing signs of basilar congestion such as moist râles and diminished breath sounds. Such an error is more likely to occur in a patient who has an etiologic factor for heart disease or actual heart disease without heart failure. White[7] has observed that pulmonary embolism may precipitate pulmonary edema especially if mitral stenosis or left ventricular strain is present. This was observed in 2 of our cases.

We have become increasingly suspicious of the presence of pulmonary infarction in patients with congestive heart failure who are resistant to therapy when a satisfactory response has been anticipated or when there is sudden regression to a state of more severe failure after a period of relative improvement. We do not mean to imply that pulmonary infarction is the sole cause for such a situation, but it is frequently responsible.

An increase in the respiratory rate was found in 30 per cent of our cases, the average increase being 10 per minute. The increase occurred, for the most part, in patients already dyspneic from underlying cardiac or pulmonary disease. Physical findings consisting of diminished breath sounds, dullness, moist râles, or signs of pulmonary consolidation were not present in any case in which the infarct was less than 5 cm. in diameter. Some or most of these signs were present in 20 per cent of the cases. They are particularly difficult to detect in patients with heart failure or pulmonary edema.

Jaundice was present in 16 per cent of the patients, all of whom had heart failure. This point stresses the frequently observed fact that excessive production of bilirubin such as occurs in hemolysis from an infarct is not of itself sufficient cause for jaundice, for the normal liver has such a reserve excretory power that it is capable of handling much more bilirubin than is brought to it. However, in heart failure liver function is impaired due to venous congestion with resultant faulty nutrition and anoxemia of the liver cells. Chavez and his coworkers[12] observed that the quantity of bilirubin was abnormally high in most cases of cardiac decompensation. The elevation of the bilirubin may not be of such a degree as to result in clinical jaundice, for the engorged liver with lowered function is able to excrete almost all the bilirubin brought to it when the amount is not excessive. However, when there is an increase in blood destruction, such as occurs in pulmonary infarction, an excess of bilirubin is carried to liver cells, the function of which is already decreased. The combination of overproduction of bile pigments and liver damage which prevents the complete absorption of these bile pigments results in the retention jaundice seen in these cases. The laboratory characteristics of this type of jaundice, with its urobilinogenuria and indirect Van den Bergh reaction, are too well known to require any further discussion. In some cases, especially when heart failure is severe, direct reacting bilirubin may be present in the blood, and bilirubin may be found in the urine.

Obstruction to the pulmonary arterial circulation by emboli may result in dilatation of the right ventricle and pulmonary conus and a train of cardiovascular signs which constitute acute cor pulmonale. Acute cor pulmonale is present in only a small number of cases of pulmonary embolism and occurs when the embolic obstruction subjects the right ventricle to severe strain yet does not result in early death. There may be distention and pulsation of the neck veins, increased venous pressure, enlargement of the liver, accentuation of the pulmonic second sound, increased pulsations in the second and third interspaces to the left of the sternum accompanied by a loud systolic murmur in this area, plus at times gallop rhythm heard best over or slightly to the left of the sternum.

ELECTROCARDIOGRAPHIC FEATURES

Certain electrocardiographic findings may be present which are of considerable diagnostic aid.[13, 14, 15] They occur most often in patients with the greatest circulatory embarrassment. They consist of (1) right axis deviation or a tendency toward it, with a prominent S wave in Lead 1 with or without depression of the S-T segment, (2) depression of the S-T take-off in Lead 2 followed by a rising S-T segment with a low, isoelectric or diphasic T wave, (3) a deep Q wave, slight convexity of the S-T segment and an inverted T wave in Lead 3, and (4) a diphasic or inverted T wave in Lead 4F. The use of multiple precordial leads may be of value in the recognition of acute cor pulmonale, since the T wave is most likely to be inverted when the precordial electrode is placed over the right ventricle,[16] the negative T4 being due to strain of this chamber. When the chest lead is placed to the left of the sternum or midway between the midsternal and midclavicular lines the T wave may be inverted, while at the same time the T wave of Lead 4F is positive. Scheifley and Dry[17] have recently emphasized an early change of acute cor pulmonale consisting of marked widening of the S waves in Lead 1 or Leads 1 and 2, which resembles right bundle branch block. Murnaghan, McGinn and White[16] observed that electrocardiographic evidence suggestive of acute cor pulmonale occurred at times when the clinical manifestations of pulmonary embolism were not apparent. They also noted that lesser grades of acute cor pulmonale may produce only a tendency to right axis deviation as evidenced by a small S wave in Lead 1 or a depressed S-T segment in Lead 1 or 2, or a Q wave and an inverted T wave in Lead 3, or a negative T wave in Lead 4. The electrocardiographic changes may be transient and disappear completely in as short a period as 24 hours. Preëxisting heart disease, digitalis effect, and abnormal myocardial changes may alter or completely obscure the pattern of acute cor pulmonale.

Electrocardiograms were not made often enough in our cases to be of value in analysis. It is quite possible that if electrocardiograms had been done more frequently considerable diagnostic help would have been obtained. In one series[16] some degree of electrocardiographic evidence of acute cor pulmonale was found in one third of 92 cases of pulmonary embolism.

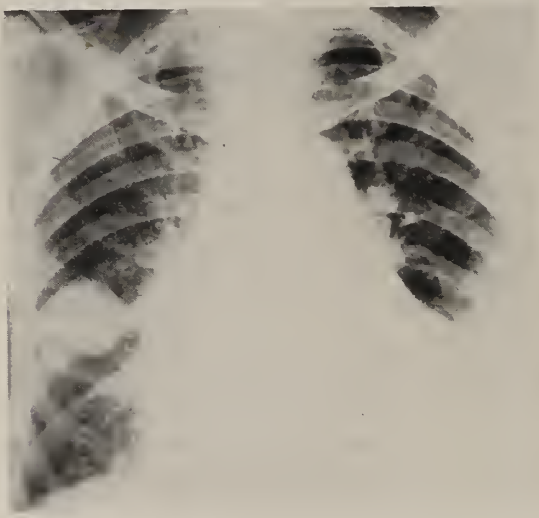

FIG. 1. The round shadow in the middle third of the right lung represents a pulmonary infarct. There is also fluid at the left base which obscured an underlying infarct found at autopsy.

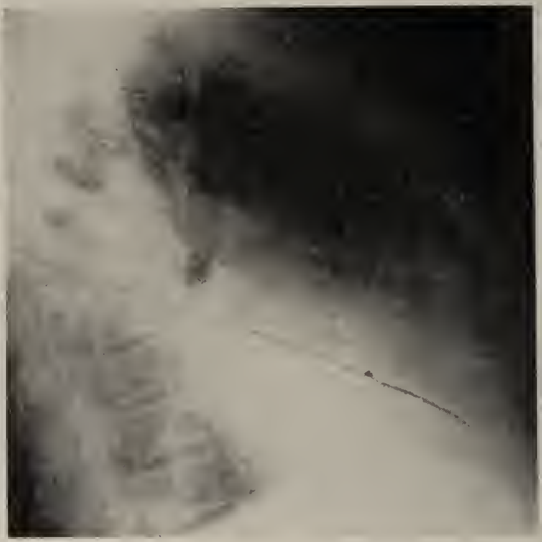

FIG. 2. Right lateral view of case shown in figure 1. The triangular nature of the infarct is clearly seen.

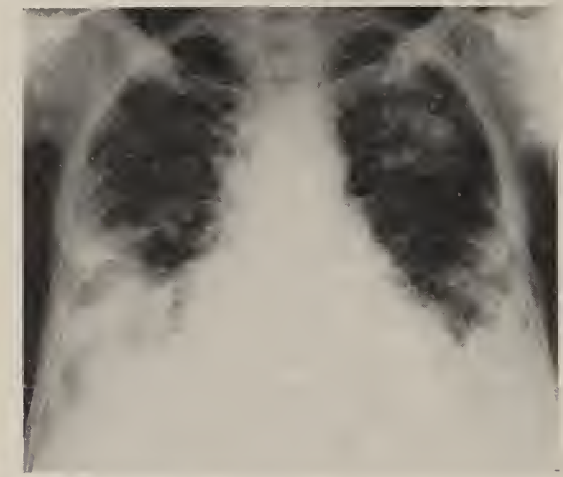

FIG. 3. Multiple pulmonary infarcts, showing a variety of shapes.

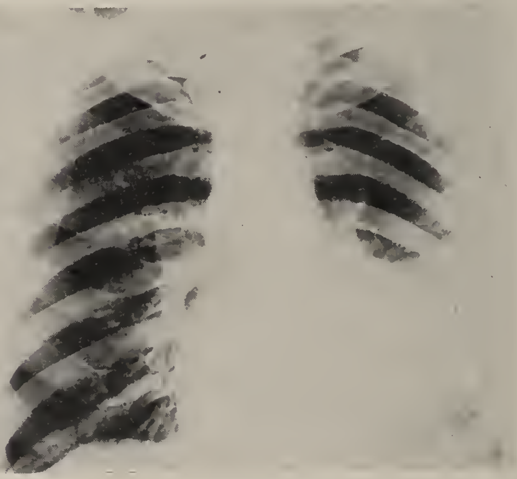

FIG. 4. The density due to pulmonary infarct shown in the lower half of the left lung persisted for a period of 5 months.

ROENTGENOGRAPHIC FEATURES

A great deal of emphasis has been placed on the roentgenographic aspects of pulmonary infarction, but certain features bear repetition. The roentgenographic appearance of pulmonary infarcts is extremely variable, and the so-called "typical" triangular infarct with the base situated peripherally and the apex pointing toward the hilum is an unusual finding, especially if the film is taken only in the postero-anterior view. Variation in the appearance of the infarcts depends on their size, location, age, and presence of secondary infection. The shape of the infarct is determined by the shape of the part of the lung involved, according to Hampton and Castleman.[2] These authors in their excellent discussion also point out that the medial or cardiac margin of an infarct is usually irregular and convex toward the heart. Thus, even when a triangular shadow is produced, the apex of the triangle is directed away from the heart rather than toward it. The only time that a triangular shadow is produced is when the X-rays pass perpendicularly to the infarcts. If the roentgen rays strike the infarct at an acute or oblique angle the shadow will be ovoid and not triangular, while if they pass through the infarct in the direction of its long axis the roentgenogram will show a round shadow (figs. 1 and 2). This is especially true when an infarct involves the right middle lobe. Such a round shadow may be mistaken for tumor of the lung or interlobar pleural effusion, and oblique and lateral views will be required for differentiation. When several infarcts occur in the same lobe or closely placed in the same postero-anterior axis of the chest but in different lobes there is considerable overlapping and summation of shadows, so that a great variety of shapes may result (fig. 3). Fluoroscopy and films taken in several positions will often demonstrate that the condition is a conglomeration of infarcts. When such an overlapping of shadows occurs, tumor of the lung must be differentiated. This is shown in figure 4. The several coalescent shadows in this case persisted with relatively little change for a period of 5 months. Bronchography (fig. 5) demonstrated occlusion of the lingular bronchus of the left upper lobe. Lobectomy was performed and the pathologic examination showed the presence of pulmonary infarction.

X-ray evidence of pulmonary infarction may be absent for 24 hours or obscured by pulmonary congestion or pleural effusion (fig. 1) or the cardiac shadow. Secondary bronchopneumonia may be present and the outline of the infarct appear hazy rather than sharply defined. Lung abscess secondary to aseptic infarction has been described[18] and occurred in 1 of our cases.

Organization of an infarct may last for weeks or months, a small infarct becoming an organized fibrous scar more quickly than a large one.[2] The X-ray shadow of such a healed infarct may persist for months or years, leaving linear streaks. These shadows are also produced by plate-like foci of atelectasis and interlobar pleuritis.[19, 20] We have observed such shadows in several of our cases (figs. 6 and 7). Localized areas of pleural thickening may also represent the end stage of a healed infarct and do not always indicate the residuum of a tuberculous pleuritis.

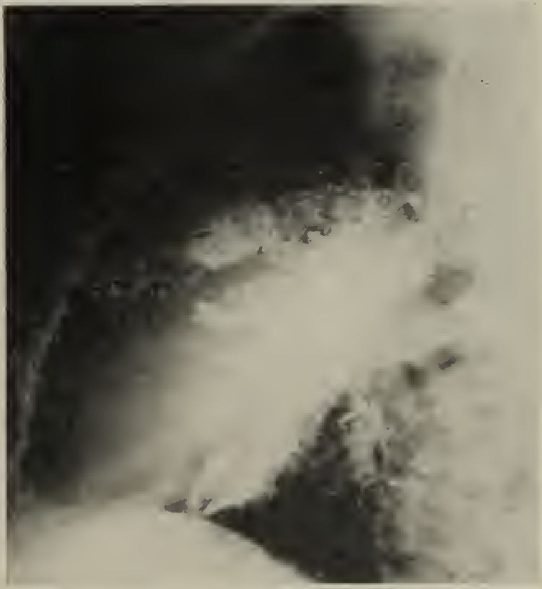

FIG. 5. Left lateral bronchogram of case shown in figure 4. There is absence of lipiodol in the lingular portion of the left upper lobe.

Infarcts are peripheral and are most commonly found where two or more pleural surfaces meet, such as the costophrenic angles, the anterior and posterior margins of the lung, or at the margins of the middle lobe. The distribution of the infarcts in our cases was as follows: 35 per cent in the right lower lobe, 25 per cent in the left lower lobe, 25 per cent in the right middle lobe, 8 per cent in the left upper lobe, and 7 per cent in the right upper lobe.

ETIOLOGY

It is not our purpose to discuss at great length the etiology of pulmonary embolism, but certain facts regarding causation and the source of pulmonary emboli seem worthy of mention.

The direct cause of pulmonary embolism is not known, but several predisposing factors are well recognized. Pulmonary embolism occurs postoperatively, as has been mentioned, and the site of operation has some bearing on the frequency of pulmonary embolism. Operative procedures on the extremities, trunk, head and neck are less often followed by thromboembolic phenomena than are abdominal operations.[21] Splenectomy has the highest postoperative rate of pulmonary embolism of all operative procedures. The severity of the operation is not the only factor of importance as is shown by the fact that pulmonary embolism following radical mastectomy occurs less frequently than after many less formidable abdominal operations.[21] Our experience regarding the relatively high incidence of pulmonary embolism following pelvic surgery coincides with the observation of many others. The number of deaths from pulmonary embolism following operations for malignant lesions is high. It is also a common observation in patients with malignant lesions on whom no surgery has been done, since inanition and dehydration predispose the patient to pulmonary embolism. On the other hand, obesity also definitely subjects a patient to the danger of pulmonary embolism.[22] The occurrence of pulmonary embolism under the age of 40 is considerably less than in the group over 40. In the cases studied by us 30 per cent were under 40, and 70 per cent of these had congestive heart failure.

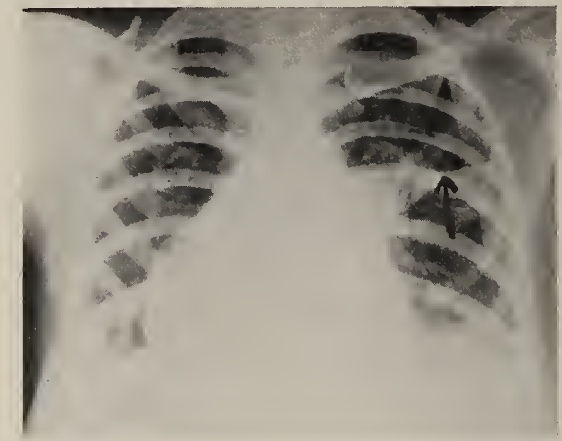

FIG. 6. Case of isolated dextrocardia of the non-mirror-image type. The arrow points to a linear strand which is the residuum of a pulmonary infarct which occurred 6 months before. There is a fresh infarct and fluid at the left base.

Other factors which are significant in the development of postoperative pulmonary embolism in particular are infection, blood dyscrasias (especially polycythemia rubra vera), leukemia, and severe anemia.

Heart disease deserves special prominence in any discussion of the etiology of pulmonary embolism. The reason for the frequency of pulmonary embolism lies in the occurrence of venous thrombosis, mural thrombi, and valvular endocarditis in patients with heart disease. The presence of venous thrombosis is associated with the immobilization and inactivity that the treatment of heart failure entails. Such a program plus elevated venous pressure, venous stasis, and perhaps physical, chemical and colloidal changes in the blood contribute to venous thrombosis.

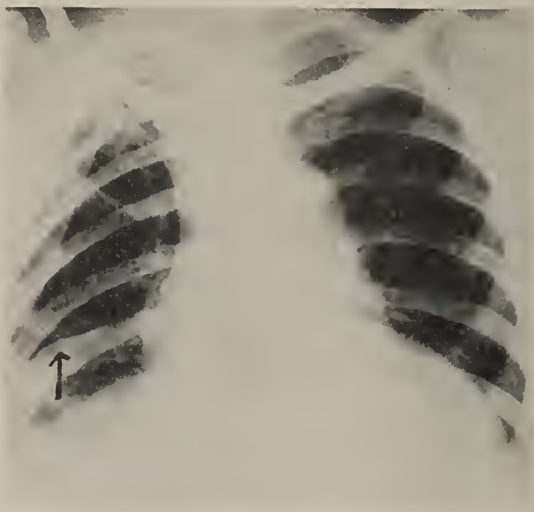

FIG. 7. Arrow points to a fibrous strand which is the result of a pulmonary infarct which occurred 3 months before.

Auricular fibrillation is often mentioned as bearing a relationship to the formation of auricular mural thrombi. Yet, according to Garvin,[23] such an association could be demonstrated to exist only in cases of rheumatic heart disease with auricular fibrillation. The reason for this is not apparent, but is not solely due to the fact that the duration of auricular fibrillation is usually greater in cases of rheumatic heart disease than in the other etiologic types, for if such were true patients with long-standing auricular fibrillation without organic heart disease should form mural thrombi more often than they do. In our series, auricular mural thrombosis was present as often in the group with heart failure and sinus rhythm as in those with heart failure and auricular fibrillation. We feel that the auricular dilatation that accompanies heart failure is more important in the development of auricular mural thrombi than is auricular fibrillation.

The source of pulmonary emboli, in addition to cardiac mural thromboses, lies in the peripheral venous system. It has been repeatedly emphasized that most cases of pulmonary embolism arise from thrombosis of the veins of the lower extremities,[2, 24, 25, 26, 27] and, to localize the origin still further, from the deep veins of the lower legs. This type of thrombus is dangerous because it is not firmly adherent to the venous wall and is easily detached. Furthermore, it may have a loose, propagating head floating in the popliteal or femoral veins.[27] It is important to bear this source of embolism in mind because of the paucity of clinical manifestations which incriminate the deep veins of the leg in these cases. The process may be almost entirely silent due to the fact that it causes little venous obstruction. However, careful examination may reveal slight calf tenderness, or tenderness of the plantar aspect of the foot, slight increase in the girth of the affected leg, and calf pain on forceful dorsiflexion of the foot (Homans' sign).

In contradistinction to the loosely adherent clot of venous thrombosis which frequently results in pulmonary embolism stands the firmly anchored inflammatory thrombus of thrombophlebitis, which infrequently causes pulmonary embolism. The emboli found in the pulmonary artery seldom reveal any evidence of organization such as would occur if an inflammatory thrombus had become detached.[5] However, the thrombus of thrombophlebitis may suddenly grow proximally and form a loosely attached propagating clot which serves as the source of a pulmonary embolus. Although Ochsner[28] has attempted to differentiate "thrombophlebitis" in which there is evidence of intravascular inflammation and little danger of embolism from phlebothromboses or silent venous thromboses which are often responsible for pulmonary embolism, the distinction is not always well defined. There are many gradations between these two extremes, and pulmonary embolism may occur with all. The important point to bear in mind is that all types of intravenous thrombosis may extend proximally and are therefore potential sources of pulmonary emboli.

Statistics regarding the incidence of pulmonary embolism that are formulated on the bases of clinically recognizable thromboses are misleading. The more obvious the manifestations of venous thromboses the less likely is pulmonary embolism; conversely the more silent the process the greater is the chance of pulmonary embolism. Thus, in only 5 per cent of cases of fatal pulmonary embolism studied by Welch and Faxon[26] did the embolus arise from easily recognized peripheral venous thromboses, while in 95 per cent of the cases the process of venous thrombosis was not obvious. Priestley and Barker[21] found clinical evidence of venous thrombosis or thrombophlebitis in only 25 per cent of 897 cases of postoperative pulmonary embolism. White[7] has stated that 70 per cent of the cases of medical pulmonary embolism have venous thromboses that give little or no clinical evidence of their presence.

It should be remembered that the upper extremity may be the seat of venous thrombi which become detached and result in pulmonary embolism. This fact is emphasized by Veal and Hussey,[29] who report 46 cases of axillary and subclavian vein thromboses. Pulmonary embolism occurred only in the group in which the thrombosis was associated with congestive heart failure, and was present in 9 of 16 cases. It is interesting that in 2 of their cases of heart failure thrombosis was of the chemical variety and was caused by intravenous injections of a mercurial diuretic.

Pelvic thrombophlebitis is an important clinical entity seen most often as a manifestation of postpartal or postabortal infection. Pulmonary embolism from this source is frequent and the resultant emboli are infected, giving rise to septic infarcts, often with abscess formation. It is the opinion of Veal and Hussey[30] that femoroiliac thrombophlebitis is often associated with pelvic thrombophlebitis and that the source of the embolus is the infected thrombus in the femoral or iliac veins. However, it must be stated that theoretically at least thrombophlebitis of the branches of the internal iliac vein may act as the source of pulmonary emboli. The recognition of this process is mandatory, because inferior vena caval ligation may be lifesaving.

The uterine and prostatic plexus are relatively unimportant as a source of fatal pulmonary embolism.[31]

Acute bacterial endocarditis of the pulmonary or tricuspid valves in which the vegetations are luxuriant and friable not infrequently causes infected pulmonary infarcts. Involvement of an interventricular septal defect or a patent ductus arteriosus may produce the same results. Although pulmonary infarction occurs with subacute bacterial endocarditis, embolism is less frequent, since the vegetations are firmer than in the acute variety.

Thrombosis in situ is a rather rare occurrence especially in the larger branches of the pulmonary arteries. It is more usual for thrombosis of the larger pulmonary arteries to start as cases of emboli and to be built up by superimposed thrombosis.[7, 32] Thrombosis in situ may occur in the smaller branches of the pulmonary arteries especially in congestive heart failure.

Not only may clinical evidence of venous thromboses or thrombophlebitis be lacking, but postmortem studies commonly fail to reveal any thrombotic phenomena responsible for pulmonary embolism. Thus, Priestley and Barker[21] were unable to find clinical or postmortem evidence of venous thromboses or thrombophlebitis in one half of their cases of postoperative pulmonary embolism. Krause and Chester[3] were unable to determine the origin of pulmonary emboli in 54 per cent of their cases. In our study no source for the pulmonary emboli could be found in 30 per cent. If the cases were excluded in which mural thrombi or right-sided endocarditis were found, then the origin of the pulmonary emboli was undetected in 60 per cent of our cases. One reason why no source for the emboli may be found at necropsy is the infrequency with which the veins of the legs are examined. If the veins of the lower extremity from the iliacs to the deep veins of the calf were explored, the source of practically all emboli would probably be found with the exception of those originating in the heart. This is borne out by the work of Hunter and his co-workers,[24] who found thrombosis of the deep veins of the leg in 52.7 per cent of 351 unselected autopsies, most of which were performed on middle-aged and older subjects. It was also observed by Hampton and Castleman.[2]

TREATMENT

It will be noted that there is considerable overlapping of etiologic factors in pulmonary embolism and venous thrombosis. This fact serves to emphasize that the problem of pulmonary embolism is in reality the problem of venous thrombosis and that when the puzzling nature of intravascular clotting has been solved pulmonary embolism will cease to be an important problem.

Greatest effort at prevention should be centered on the group of patients who have factors which make them liable to pulmonary embolism.

This does not mean that a prophylactic program should be limited to this chosen group but rather that greater care is necessary for the patients known to be predisposed to embolism.

Therapy aimed at increasing the rate of venous return from the lower extremities will prevent many instances of pulmonary embolism. Several measures have been used to accomplish this. The use of the Trendelenburg position for 24 hours postoperatively, passive and active leg exercises, frequent leg massage for the first 48 hours and 2 or 3 times daily thereafter until the patient is out of bed, application of heat to the legs, deep inhalation several times daily, and early postoperative movement, have been advocated.

It has been shown[21] that 36.2 per cent of patients who die of pulmonary embolism or infarction have had antecedent episodes of embolism. Also that of those patients who had pulmonary embolism or infarction and survived, 33 per cent had 1 or more subsequent episodes and 18.3 per cent died of subsequent pulmonary embolism. From these statistics it can be seen that reduction in the mortality and morbidity of pulmonary embolism depends on the recognition of preceding attacks and prompt institution of therapy to prevent further attacks. The use of heparin to prevent subsequent pulmonary infarcts in patients with preceding infarcts or to protect those with venous thrombosis from the danger of pulmonary infarction has been advocated. Thus, Priestley and Barker[21] noted that only 3.2 per cent of heparinized patients who experienced nonfatal pulmonary embolism subsequently died of pulmonary embolism, whereas 18.3 per cent of an untreated group died. Heparin also ameliorated the clinical symptoms of infarction. Other authors[33, 34, 35, 36, 37] have recognized the value of heparin for prophylaxis against embolism in patients with thrombosis or with evidence of nonfatal embolism. However, it must be admitted that the routine use of heparin on all patients predisposed to thrombo-embolic manifestations is impractical. The expense and difficulty of administration make its use prohibitive in these cases. Furthermore, heparin has no effect on the thrombus already formed, and a propagating clot may form at the site of the thrombus when its use is discontinued. Other disadvantages include the difficulty in determining when it can be discontinued safely, hemorrhagic complications such as hematomata of the operative wound, hematuria and cerebral hemorrhage, and the occasional failures that occur during its use.

More recently an anti-coagulant, dicumarol [3,3′methylene-bis-(4 hydroxycoumarin)] has been recommended to prevent thrombo-embolization.[38, 39, 40, 41, 42] This preparation, which is made from spoiled sweet clover and also has been synthesized, can be administered orally or intravenously. It produces its effect by suppression of the formation or utilization of prothrombin. Barker, Allen and Waugh[39] administered dicumarol to 91 patients who had experienced 1 episode of pulmonary infarction. The expected incidence of subsequent infarction was approximately one third or 30. Actually, however, only 1 case developed a subsequent embolus, which incidentally was nonfatal. It should be noted that even in this 1 case the treatment with dicumarol was inadequate, for at the time of the second pulmonary embolus the prothrombin time was only slightly prolonged (85 per cent of normal).

Dicumarol was also used by these investigators in patients who had postoperative thrombophlebitis, abdominal hysterectomy (in which the incidence of thrombo-embolic phenomena is high), and on other patients who had various types of operation and presented conditions which predisposed them to pulmonary embolism. None of this group developed pulmonary embolism. Others[40, 42, 43, 44] have repeated this work and have agreed that the administration of dicumarol is effective in the prevention and treatment of pulmonary embolism. As with heparin, dicumarol has no effect on the thrombus already formed, and hemorrhagic reactions occur in 10 to 20 per cent of the cases. Repeated transfusion of fresh blood or plasma by supplying prothrombin is usually effective in restoring the prothrombin time to normal and abolishing the bleeding tendency. Vitamin K, in doses greater than those effective in hypoprothrombinemia due to other causes, has been ineffective in lowering the prothrombin time or controlling hemorrhage. However, in a recent report[45] it has been shown that doses of vitamin K_1 oxide (true vitamin K) as large as 100 to 450 mg. have been effective in shortening the prothrombin time in patients receiving dicumarol and that its therapeutic use may thereby be made safer.

Many efforts have been made to establish some method of detecting which individuals are susceptible to thrombosis and therefore are candidates for anticoagulant therapy. Shapiro, Sherwin and Gordimer[46] estimate prothrombin times postoperatively, and in those instances in which a state of relative hyperprothrombinemia exists dicumarol is administered. The shortening of the clot retraction time has been shown by Hirschboeck and Coffey[47] to coincide with the occurrence of pulmonary embolism. These authors explain that pulmonary embolism is likely to occur because of the great ease with which the thrombus is detached from the vessel wall in patients with rapid and strong clot retraction. This shortening of the clot retraction time has been used by Hirschboeck and Coffey[47, 48] as an indication for anticoagulant therapy. DeTakats[49] has devised a heparin tolerance test to select those patients who are susceptible to thrombosis.

If it is agreed that medical therapy using anticoagulants leaves much to be desired in the prevention of pulmonary embolism, what may be said of surgical treatment? A great deal of disagreement exists as to the indications for surgery in patients with peripheral venous thrombosis. The conclusions which we have drawn are a composite of present trends, plus the experiences at Gallinger Municipal Hospital of Veal and Hussey.[50]

In a patient who has had 1 episode of pulmonary infarction and evidence of venous thrombosis, venous ligation is mandatory. In cases of so-called "silent" thrombosis beginning in the deep veins of the calf, even in the absence of pulmonary embolism, ligation of the femoral vein as a prophylactic measure is generally indicated. With true thrombophlebitis of the deep veins of the calf in a patient under 40 and in the absence of pulmonary infarction femoral ligation is optional. However, when evidence of extension to a higher venous level occurs, femoral ligation or ligation at a higher level if necessary is advised. In patients over 40 with this type of thrombophlebitis early ligation is indicated because of the high mortality from pulmonary infarction in this age group.

Thrombosis of the saphenous vein in the absence of thrombosis of the deep veins may occasionally give rise to pulmonary embolism. Simple ligation and division of the involved saphenous veins at its junction with the popliteal or femoral vein should be done.

When primary acute iliofemoral thrombophlebitis occurs, the danger of pulmonary embolism is not great.[26, 27] However, when, as has been mentioned, a fresh, propagating thrombus is superimposed on the initial adherent thrombus, pulmonary embolism may occur. Exploration of the iliac veins is indicated if this occurs, with extraction of the clot if possible and ligation of the involved iliac vein or inferior vena cava if necessary. When evidence of acute inflammation of the femoral or iliac vein is present at exploration, thrombectomy is inadvisable, since it has been shown[50] that the chance of recurrent thrombosis is great, and therefore ligation and division above the diseased portion of the vein is advised.

Veal and Hussey[29] advocate ligation of the subclavian vein in patients with heart failure who have thrombosis of the axillary or subclavian vein. Their reasons for this procedure are supported by the frequent occurrence of pulmonary embolism and propagation of the clot into the innominate vein.

The use of venography in diagnosis and the technic and selection of veins for division are beyond the scope of this report.

As to the treatment of an attack of pulmonary embolism, the administration of papaverine hydrochloride intravenously is recommended. The use of atropine intravenously is advocated by some in view of experimental evidence which postulates a vagal pulmonocoronary reflex as well as vagal bronchoconstriction in pulmonary embolism. The administration of oxygen to combat anoxemia is desirable. Morphine is usually necessary when great restlessness and dyspnea are present. If superimposed pneumonitis occurs sulfonamide therapy may be of some value. Thoracentesis is rarely necessary and should be done only if there is evidence of respiratory embarrassment from pleural effusion. This rarely occurs if there is less than 1,000 c.c. of fluid in the pleural cavity. In the presence of shock the usual measures for its treatment should be instituted. When the smaller pulmonary vessels are involved very little additional treatment is needed other than bed rest and symptomatic treatment for pain if it is present. If the patient recovers from the initial shock of embolism involving a large pulmonary artery, embolectomy has been recommended. This is a very dangerous procedure requiring great skill and has rarely been successfully performed.

Summary

Pulmonary embolism and infarction have been discussed on the basis of a study of 50 patients seen clinically and at postmortem examination. In one third of the patients pulmonary embolism or infarction was the direct cause of death or an important contributory factor.

The chief symptoms and signs indicating the presence of pulmonary embolism or infarction in this series were fever, rapid heart rate, and leukocytosis. At times these were the only evidences. Hemoptysis, jaundice, pleural effusion, and signs of pulmonary consolidation were present less often.

The variable roentgenographic findings have been described.

Pulmonary emboli arise chiefly from thrombosed deep veins of the legs and from mural thrombi or vegetations in the heart.

In the treatment, methods of increasing the venous return from the lower extremities particularly in patients over 40 years of age confined to bed, vein ligation to prevent recurrence of pulmonary embolism, heparinization, and the administration of dicumarol have been discussed. The use of papaverine hydrochloride or atropine intravenously, oxygen, and morphine have been helpful for the immediate treatment of acute pulmonary embolism.

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(*Continued on page 212*)

THE ROLE OF THE PRIVATE PHYSICIAN AND OF THE VOLUNTARY AGENCY IN THE CONTROL OF TUBERCULOSIS

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DR. Allen K. Krause once said, "Some day a man will write a new kind of history. Its keynote will be the shaping of human destiny by disease and, let us hope, the guidance of this destiny by the control of disease."

What has been accomplished in the last forty-two years in the control of tuberculosis would make an interesting chapter in such a history—the death rate reduced from 202 to 43.5 per 100,000, tuberculosis being seventh instead of far in the lead as the first cause of death. Had the 1900 death rate still obtained, there would have been last year in this country 263,000 deaths from tuberculosis instead of 57,000. Computing the cost to the community of each death from tuberculosis at $3,000, a low estimate, the millions of lives and the billions of dollars thus saved are impressive even during these days and in this center of big figures.

But the war against the tubercle bacillus is by no means won. Although tuberculosis control is a social and an economic as well as a medical problem and although it calls for the best efforts of all those interested in human betterment, it is largely upon the medical profession that the completion of the task of bringing the disease under real control depends. Control is also not simply a problem for specialists and those in the field of public health but for all private physicians as well, working both as individuals and through their organized medical societies.

Tuberculosis still causes more deaths during the most active period of life, 15 to 45, than any other disease. Based on information from large surveys in various parts of the country it is estimated that there are approximately 500,000 or more people in the United States who have clinical tuberculosis, in the majority of whom the disease is still undiscovered. Most of them are in the early, curable and noninfectious stage, though even quite a number of the undiscovered cases are in the moderately advanced and far advanced stages.

There is another group of 500,000 to 750,000 who have tuberculosis in the quiescent or arrested stage, many of whom under the stress and strain of modern living will have a recurrence of activity. There is also a vast number of those who have tuberculous infection but who as yet have no tuberculous disease. Many of these have superinfections through long and close exposure to open cases of tuberculosis, and an appreciable number of these will eventually develop active lesions.

The problem of tuberculosis control is all the more difficult because there is nothing spectacular about the disease, because there are rarely any clinical symptoms during the early and often during the moderately advanced stages, and also because even the best diagnosticians can rarely detect any abnormal physical signs during the early and often during the moderately advanced stages of the disease.

The main essentials for real control are:

1. Early diagnosis and treatment.
2. Isolation and treatment of all those who have active disease.

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* Read before the Society, November 10, 1943.

3. The close follow-up and the rehabilitation of quiescent and arrested cases.
4. Education of the public.

Early Diagnosis

Before early diagnosis becomes the rule instead of the exception, as it largely is at present, it is necessary for every practicing physician to be tuberculosis-conscious. Private practitioners constitute the first line of defense and they need ever to be on the alert. Dr. Irvin Abel, while President of the American Medical Association, said: "The responsibility for a further reduction in the death rate from tuberculosis is largely a problem for the practicing physician who first sees the patient and has the opportunity of applying both preventive and protective measures and of recognizing the disease and instituting appropriate treatment in its incipiency." A survey of all of the tuberculosis sanatoria in the United States in 1935 by the Council of Medical Education of the American Medical Association shows that only 13 per cent of admissions to sanatoria were minimal and that 57 per cent were far advanced. A survey I made of the Negro sanatoria in 1938 showed only 7 per cent of the patients to be minimal and 72 per cent far advanced. Such conditions are the result of patients waiting until they feel sick to consult a physician and of physicians not searching for tuberculosis until the patient develops suspicious symptoms. Private physicians as well as tuberculosis specialists and directors of public health should keep constantly in mind the possibility of all patients whom they see having tuberculosis. By the free use of the tuberculin test on patients who consult them, and by having the positive reactors X-rayed, and by advocating and helping to organize surveys of apparently healthy groups who are likely to show a high percentage of clinical tuberculosis, private physicians can have a large share in the discovery of the majority of cases of tuberculosis in the early and curable stage. All are familiar with the wonderful demonstration of tuberculosis control which the veterinarians of the United States have given us in the essential eradication of tuberculosis among the cattle of this country through the use of the tuberculin test and the slaughtering of the positive reactors.

When tuberculin testing and X-raying of the positive reactors and treatment and isolation of those who have active disease are widely applied, we may begin to think of eradication of tuberculosis in human beings instead of simple control. Every one should have an X-ray film of his chest made and placed on file for future reference. It would be well too if all the positive tuberculin reactors could have either a fluoroscopic examination or an X-ray film every year.

At present this probably is not practicable, but there is a likelihood that it will become so through the use of photofluorographic or microfilm equipment, which is already sufficiently accurate to have been chosen by the Army and Navy for the X-raying of registrants and by the U. S. Public Health Service for mass surveys of war workers. After the war the equipment will be still further improved, and it will be possible to get satisfactory X-ray films of the chest at a fraction of the present cost. Since at present the available X-ray equipment is somewhat limited, it is advisable to limit mass surveys to those groups which yield the highest percentage of clinical tuberculosis. Many private physicians have fluoroscopes in their offices and make a fluoroscopic examination of the chest of every patient who consults them. A number of general hospitals are now making chest films on every patient admitted. In not a few of those supposed to be sick with other ailments tuberculosis is found either as a complication or as the cause of their sickness.

The group of the apparently well who need most to be studied are contacts who live or have in recent years lived with open cases of tuberculosis, low income groups, industrial workers, Negroes, Indians, teen-age and early adult age groups such as high school and college students, and those living in sections of communities where the death rate is unusually high. Also apparently healthy groups should be studied whose occupations are such that in case they do have the disease they are liable to be wide disseminators of infection, such as school teachers, janitors, bus drivers, food handlers and personal servants.

The tremendous number of active cases of tuberculosis discovered in the X-ray examination by the Army and Navy of supposedly healthy registrants in the prime of life is most revealing. It is estimated that by the end of this year at least twelve million registrants will have been X-rayed. Approximately 1 per cent have shown X-ray evidences of pulmonary tuberculosis sufficient to reject them for military or naval service. At least one third of the cases discovered are found to have lesions of clinical significance. The U. S. Public Health Service is also making an extensive mass survey of workers in war plants. It is expected by the end of the present year that the number so examined will reach two million, including both men and women of all ages. So far it is found that approximately 1½ per cent of this group show pulmonary lesions by X-ray, one third of which are clinically significant. It is also revealing to students of tuberculosis control to learn that 87 per cent of the clinical cases of tuberculosis found by the Army and Navy and 95 per cent of those found by the U. S. Public Health Service had not been discovered or reported previously. Fortunately the great majority of the cases discovered in such surveys are in the minimal or curable and noncontagious stage.

Such demonstrations should be a wonderful stimulus to private physicians to employ modern methods to rule out tuberculosis in the patients who consult them regardless of what their ailments may be. Numerous pediatricians routinely give the tuberculin test to every child brought to their offices. They have an X-ray film made on the positive reactors and recommend that a study be made of all the other members of the household in order to discover the source of the infection and to prevent further infection of the child. Physicians should feel ho hesitancy in urging contacts to come to them or to the physician or clinic of their choice for a thorough study. Progressive physicians should consider themselves guardians of the health of the families and of the communities which they serve. They have no hesitancy in immunizing other unprotected children in the home when one of them develops diphtheria. They do not hesitate to vaccinate all of the other members of the family when one contracts smallpox or typhoid fever. It is no less important for them to make a study of all the contacts of every clinical case of tuberculosis or positive-reacting child so that any who may have the disease can be discovered in the early stage and so that disseminators of infection may be isolated and treated. In the study of such contacts it is wise for the physician to use the tuberculin test even though he knows that practically all contacts of open cases of tuberculosis will be positive. This positive reaction often will be the only tangible evidence that apparently well contacts are infected, and it will make them much more willing to be examined and report at periodic intervals for reëxamination.

It is of course not expected that all family physicians and private practitioners should be experts in the diagnosis and treatment of tuberculosis. If, however, they will take advantage of expert consultation service, they will ordinarily have little difficulty in the handling of the average case of tuberculosis. Consultation service in cities is easily available either from private experts in diseases of the chest or from public clinics. Even in rural areas consultation service can usually be provided. Most state, county and municipal sanatoria provide consultation clinic service to patients referred by physicians. Many county health departments conduct tuberculosis clinics which are equipped with fluoroscopes and most of them with facilities for making X-ray films of the positive reactors. In a number of instances the clinics are conducted by chest specialists who have been selected to render this service by county medical societies. In counties where such specialists are not available private physicians or health officers often conduct the clinics after having had intensive courses in fluoroscopy, X-ray film interpretation and other diagnostic procedures at their local or state sanatoria, or after postgraduate courses such as that given by the Trudeau School of Tuberculosis. In North Carolina the three state sanatoria and some of the county sanatoria offer free pulmonary X-ray consultation service to physicians. Many private practitioners have their own X-ray equipment, and each month the three state institutions receive from 800 to 1,000 films for interpretation. At present this X-ray consultation service is one of the most fruitful sources for the discovery of early cases of tuberculosis.

TREATMENT AND ISOLATION OF PATIENTS WITH ACTIVE DISEASE

There is no possibility of tuberculosis control so long as patients with positive sputum and active disease live in crowded and often unsanitary homes, nor so long as patients with chronic but infectious tuberculosis, many of whom claim to have only chronic bronchitis, circulate freely among the general public. All agree that such patients should be treated in sanatoria until they either become noninfectious or are taught to practice the necessary precautions to protect those with whom they live.

It is very important for patients with minimal disease, showing X-ray evidence of activity, to go on the rest cure even though they have no symptoms or physical signs. The many thousands of such patients being discovered by the Army and Navy examinations and in the many mass surveys which are in progress offer private physicians a great opportunity to participate in tuberculosis control. Practically all of these patients will be referred to their private physicians for consultation and advice. Those who go on the rest cure will practically all get well and most of them will be able to go back to their former jobs or professions. Because they look and feel perfectly well, because their families need their income, and because of the present high wage scale many will not be willing to quit work. Some will not believe that they have the disease and others will hope blindly that it will never cause them to become disabled. Private physicians have the confidence of their patients and can do more than anyone else to persuade such patients to go on the rest cure while they have an opportunity to get their disease under control in a relatively few months without having to take any of the long-drawn-out and often expensive forms of collapse therapy. The great majority of these patients with minimal disease should also go to sanatoria for treatment where they cannot only get an arrest of their disease, but where they can also be educated to live in such a way as to avoid a future breakdown. In heart-to-heart talks private physicians can explain to patients the nature of tuberculosis and can secure their coöperation in continuing the rest cure, not only until their symptoms disappear, which will probably be soon after going to bed, but for months later until X-ray films show that the lesion is retrogressing.

Since most sanatoria are overcrowded and have a waiting list it is usually necessary for patients to have to wait from a few weeks to a few months for admission. Unless such patients are under the care of physicians who understand the importance of bed rest many will have a spread of the disease and some will lose their chance of ever recovering their health. It is especially needful for all internists and family physicians to familiarize themselves with the technic of bed rest, modified bed rest, and graduated exercise as applied in modern sanatoria, so that they can properly care for patients both before and after sanatorium treatment and give proper home treatment to those who for any reason cannot go to a sanatorium.

Unfortunately many communities have a

shortage of beds for tuberculous patients. Private physicians through their personal prestige in the community and through their organized medical societies are always able to exert more influence than any other group in getting governmental agencies to provide the necessary number of sanatorium beds and to pass such legislation as is needed. The National Tuberculosis Association and the U. S. Public Health Service recommend at least 2 beds per death as the minimum requirement for tuberculosis control and state that 3 beds per death are very much more desirable.

Another most useful service which a limited number of physicians in private practice can render to tuberculous patients is for them to equip and prepare themselves to continue refills of air to patients who are ready to leave the sanatorium but who need to continue pneumothorax treatment. There should be at least one physician in every county or city of any size who is prepared to give this treatment. In many states arrangements have been made with private physicians for this service, so that few, if any, patients will have to ride more than a few miles to get refills. It is essential for physicians rendering this service either to have their own fluoroscope or to have access to the use of one. Arrangements should be made for those who are able to do so to pay for their own refills, and those of indigent patients should be paid for at a reduced rate by the welfare department or rarely by tuberculosis associations. Many physicians find this service both interesting and sometimes remunerative.

It is also important for private physicians to impress upon patients with active disease the necessity of taking precautions to protect those with whom they live. They should advise patients of the danger of contagion and should give them literature explaining in detail and in simple language the precautions which both they and the other members of the family should take. Physicians should also see that a private or a public health nurse visits the home to see that the necessary sanitary supplies are provided and to explain in detail any of the printed instructions which are not thoroughly understood. The early reporting of all clinical cases discovered to the health department by the physician is of course essential.

THE REHABILITATION AND FOLLOW-UP OF PATIENTS WITH QUIESCENT AND ARRESTED DISEASE

If the sanatorium has functioned as it should, discharged patients will know how to adjust their lives on returning home in such a way as to avoid a reactivation of their disease. For the first few months after returning most tuberculous patients will be cautious, but as they gradually become absorbed in business and social affairs many of them will forget their training and eventually have another flare-up. Sanatorium officials urge their patients on returning home to place themselves under the care of their private physicians, and they advise the physicians as to the patient's progress in the sanatorium and make recommendations as to the amount of rest and exercise which they should continue to take. Private physicians who take an especial interest in the progress of their patients after discharge can do much toward guiding them to a permanent arrest of their disease by encouraging them to get periodic examinations and X-ray films and to continue to take proper care of themselves outside of work hours when they return to their jobs.

Fortunately, as above stated, most patients with early tuberculosis and many with more advanced disease can return to the same jobs which they had before their breakdown. However, few with more than minimal disease who made their bread by the sweat of their brows can hold up under the amount of physical exertion required by their old jobs and need to be trained for positions requiring less physical strain. In practically all of the states well organized vocational rehabilitation departments, which are branches of the state educational system, will train any tuberculous patient whose sputum is negative and whose disease is apparently arrested for whatever occupation he seems to be best fitted. Private physicians can render valuable service in advising what occupation will be most suitable and can be of great service in making periodic examinations during their training. Private physicians can also render patients whose disease is arrested a great service by persuading employers to restore to them their former jobs.

THE EDUCATION OF THE PUBLIC

As in rehabilitation of the patient, education of the public is a joint responsibility for both physicians and laymen, working both as individuals and through volunteer and official organizations. In spite of all the efforts to educate the public in regard to tuberculosis through the past forty years, the ignorance and superstition which still exist in regard to tuberculosis are amazing. This is true not only among the illiterate but often also among those who are otherwise intelligent. Among the many ways in which private physicians may assist in the education of the public may be mentioned the making of addresses on tuberculosis to both lay and professional groups, giving radio talks, writing articles in newspapers, censoring information issued to newspapers or in pamphlet form by volunteer or official agencies, serving on boards of tuberculosis associations, and endorsing personally and securing the official endorsement of their medical societies of early diagnosis campaigns, of mass surveys and of public clinics for those who are unable to consult private physicians.

The main hope for educating the public, however, is through the establishment of health education courses in our public schools and colleges. Physicians can do much by using their influence for the establishment of such courses. If we educate the youth of our country in matters pertaining to public health many of them will teach their parents.

THE ROLE OF THE VOLUNTEER AGENCY IN THE CONTROL OF TUBERCULOSIS

The National Tuberculosis Association, a voluntary agency with its state and local branches composed of both medical and lay members, has for almost four decades not only been mainly responsible for the education of the public but it has also been the most potent community force in the whole fight against tuberculosis. It is probably the most efficient volunteer public health agency ever organized. The parent association and its various branches have succeeded in a marvelous way in mobilizing both the medical and lay forces in this country for a united campaign to control the disease.

When the National Association was organized in 1904 there were no national and only about a dozen struggling local tuberculosis associations. There were only a very few sanatorium beds. There was very little local community relief for helpless tuberculous victims and their families. There were few public clinics, practically no public health nurses, and little organized medical and social research. For the first few years the funds of local associations had to be used largely for relief, for the construction and maintenance of sanatorium beds, and for paying for clinic and nursing services. As fast as the public could be sufficiently convinced of the value of these means of control to finance them from public funds the voluntary associations have transferred them to official agencies and devoted their efforts to control measures which could not be financed by public funds.

The annual raising of several million dollars through the Christmas Seal campaign; the further education of the public; the encouraging and financing of medical and social research; assisting in the training of clinic directors, health educators, medical social service workers, vocational rehabilitation directors, public health nurses and executive secretaries; the launching of early diagnosis campaigns; the organizing of

(*Continued on page 212*)

President's Page

WHAT DO DOCTORS READ?

Washington physicians were never busier than they are now. This is particularly true of general practitioners, who put in exceedingly long hours with few opportunities for relaxation. For the most part, they are no longer youngsters. In fact, a majority of them are middle-aged or older and the strain of wartime practice is in a number of instances plainly visible. Although not all physicians are as busy as general practitioners, generally speaking, they are "up to their ears" in work.

It is natural under these conditions that many doctors should find little time to peruse medical journals, not to mention recent scientific books. However, a surprising number keep up on their medical reading. Very few pay any attention to what is written on social and economic aspects of medicine. This has little to do with the fact that they are busy. For the average physician finds such reading uninteresting and he would rather gather his information on the subject "catch-as-catch-can."

The other day I heard a doctor inquire about the Wagner-Murray-Dingell bill. He wanted to know what chance it had of passage. He said he had read very little about the legislation but he had heard that if it were enacted physicians would be employed by the Government and that the Surgeon General of the Public Health Service would be the doctors' "boss." He admitted that considerable material had been sent him on the subject which he had thrown into the waste basket. Despite this show of indifference he was worried about the future of medical practice.

Reports would seem to support the statement that this doctor is typical. In critical times such as these this is unfortunate, for unless doctors know definitely what is proposed in the way of changes in medical practice they cannot intelligently meet issues confronting them.

Yes, our doctors are extremely busy, not a few being overwhelmed with work. But problems with which they are faced will not await solution until more peaceful times. Something has to be done about them now. Even a few minutes out of a crowded day devoted to informing themselves may make the difference between defeat and victory. An informed medical profession will be a strong profession.

Fred R. Sanderson

Editorials

THE RETURNING PHYSICIAN

It is estimated that the 3,000 physicians who were in the Medical Corps of the Army and Navy in 1940 had been augmented in 1944 by about 52,000 medical practitioners. Of this number approximately 400 have been drawn from civilian practice in the District of Columbia. What is to be the fate of these doctors after the war?

It is not improbable that medical personnel in the armed forces will be among the last to be demobilized. As combat operations roar into a mounting crescendo, casualties will be accumulating in increasing numbers. Since "patients will not be discharged to the Veterans' Bureau until they are as well as we can get them," it is predicted that numerous Army and Navy medical establishments will have to be maintained for their care.

In addition medical personnel will be needed by AMGOT and UNNRA in countries under allied military control. Their requirements promise to be considerable and physicians connected with these agencies will perhaps not return to civilian life for a long time.

When these lines were written military operations had not yet reached their peak. On the other hand, the trek back to civilian life of a small number of medical men had already begun, mostly by the C.D.D.* route. It is likely that the number of returning physicians will be gradually accelerated. To what can these returning physicians look forward?

Letters received at the Society's office and by individual members from their friends in the services indicate that the most commonly expressed fear is that they will have to return to a regimented Government system of medical practice. Their experience with paper work has decreased their enthusiasm for such a prospect.

Some of them have long been separated in the services from close contact with patients or from the type of practice for which they were trained and are keenly desirous of an opportunity to brush up on their skills and knowledge prior to returning to practice. Some will want to remain in the services or will apply for Governmental professional positions, either because they have a liking for that type of work or because they will enjoy the sense of security which goes with a regular pay check. Some have caught glimpses of new horizons and will desire to return to non-Governmental life but in other fields than those in which they formerly engaged.

Elsewhere in this issue of the MEDICAL ANNALS appears an analysis of questionnaires sent to Society members last February in regard to what they individually could offer in the way of office space and associateships. Reference was made by several who replied to postgraduate training and resumption of former positions in hospitals and medical schools. It must be admitted that the very least that should be done is to restore the names of returning physicians to their former positions on the staffs of hospitals and medical schools. Furthermore, refresher courses as well as full scale postgraduate courses in medicine and the various specialties will be essential.

The cutting off of further accessions to medical schools under ASTP after July 1 next with induction directly into the services of potential medical students will inevitably be followed by a great reduction in the undergraduate enrollment in medical schools as successive classes are graduated. Medical schools will therefore be able to use their resources for the training of returning physicians. A word of warning to medical schools at this point might be offered because of the danger of growing too comfortably accustomed to the employment of Government money for the operation of their institutions. Of this danger most administrators and boards are already keenly aware. It is to be hoped that they will not give way to the temptation to sacrifice their freedom for financial gain.

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* Certificate of Disability for Discharge

H. P. R.

THIOURACIL TREATMENT OF THYROTOXICOSIS

The idea of using thiouracil in the treatment of hyperthyroidism is an outgrowth of the study of a variety of compounds capable of causing goiter in experiments on animals. When it was learned that the goiter of these experiments represented growth of the thyroid gland in compensation for induced deficiency of thyroid hormone, the prospect of treating hyperthyroidism by means of these goitrigenous agents became attractive. From more than a hundred compounds studied, thiouracil was selected as most promising for clinical trial.

Thiouracil is believed to cause lowering of the basal metabolic rate by inhibiting the formation of thyroxin. However, the exact mechanism by which this is accomplished is unknown. The drug has no effect on the activity of thyroxin already stored in the thyroid gland, so that the speed of its action in cases of hyperthyroidism will depend largely upon this factor. Therefore, a rapid effect from thiouracil may be expected in cases of untreated Graves' disease, in which the amount of stored thyroxin is slight; a somewhat slower effect in cases of simple hyperthyroidism or in cases of Graves' disease previously treated with iodine.

To date the literature contains reports, preliminary for the most part, on the use of thiouracil in about 40 cases of hyperthyroidism. Astwood[1] uses a dose of from 0.3 to 0.6 Gm. daily in divided doses for the initial treatment. In Graves' disease the response to the drug has been prompt, signs of improvement beginning within 3 to 18 days, and the basal metabolic rate reaching normal limits within 10 to 26 days. The response is delayed for reasons mentioned above in cases previously treated with iodine and in cases of nodular goiter with hyperthyroidism. When improvement is distinctly manifest, smaller doses of thiouracil apparently suffice to maintain a normal basal metabolic rate.

Toxic effects from thiouracil presumably will be few. Astwood[2] has reported the development of agranulocytosis in 1 case, "drug fever" in 2 cases, and diarrhea of undetermined cause in 1 case out of a total of 40 cases in which the drug was used. The patient who developed agranulocytosis was receiving much larger doses than are now recommended. Williams and Bissell[3] observed transient, inconsequential swelling of the submaxillary salivary glands in one of the 9 cases in which they used the drug. These authors call attention to the fact that thiouracil apparently acts in humans, as it does in animals, to cause an increase in activity of the thyrotropic hormone of the pituitary gland. In several of their cases, slight enlargement in the thyroid gland was associated with use of the drug during the first two weeks, and in 1 case there was an increase in the oculopathy. They suggest that when thiouracil has exerted a controlling effect on hyperthyroidism, the simultaneous administration of thyroid extract may be advantageous for the prevention of excess thyrotropic activity.

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[1] Astwood, E. B.: J. A. M. A., 1943, **122**, 78.

[2] Astwood, E. B.: Bull. New England M. Center, 1944, **6**, 1.

[3] Williams, R. H., and Bissell, G. W.: New England J. Med., 1943, **229**, 97.

The exact place that thiouracil will occupy in the treatment of hyperthyroidism is of course still uncertain. A much larger experience than is now available will be needed before this is decided. However, the initial reports promise that its place will be an important one and certainly justify its further trial.

H. H. H.

THE BEDSIDE MANNER

One of the most important characteristics of great men in medicine who have inspired and deserved our admiration and affection is the "bedside manner." The term as used here connotes depth of learning and sincere concern for the patient which is the only sound basis for confidence in a doctor. This "manner" has been and is seen at its best in consultation in the sick room for here the consultant observes meticulous consideration for his fellow practitioner, whose guest he is for the moment. There is nothing finer than this relationship in medicine.

Recently a Washington physician was quoted as saying that something should be done to prevent physicians from suggesting to patients that they have been carelessly or badly treated at the hands of a previous attendant. The implications in this statement are that doctors as a rule are unfair to each other. It can be safely said that rarely does a physician with malice of forethought disparage another practitioner in the presence of a patient. On the other hand, physicians have not always been as diligent as they might be to explain to a patient coming to them from another doctor that a sense of dissatisfaction or distrust may be based on misunderstanding or a faulty evaluation of results. Withholding a judiciously favorable comment on a colleague may really leave a physician open to serious criticism. For, as Robert Louis Stevenson observed, "One may sit in a room and listen in silence while a friend is attacked and leave the room having more completely condemned his friend than if he had spoken."

It is not meant to suggest that malpractice should be condoned or defended but merely that physicians be extremely cautious and fair toward a previous attendant when they find themselves being credited with exceptional ability and judgment. Indiscretion is usually a boomerang. It would be too bad if it injured only the sender. Not infrequently when badly aimed or well aimed with bad intentions, it may become a dangerous instrument, resulting in damage to the patient, the doctor and the entire medical profession. A boomerang might just as well be swung gently and carry a message of good will, to restore confidence to a doubting and unhappy patient, returning to give the sender a feeling of satisfaction in a deed well done.

Possibly the noise and confusion of the times may tend to dim the appeal of the Golden Rule. More, perhaps, than ever before we are called upon to be our brother's keeper. To serve our brother best, we must observe proper rules of conduct actively rather than passively. The Rule does not say we must not do unto others what we do not want them to do unto us but rather *do* unto others as we would have them *do* unto us. This, it would seem, is the keynote of the "manner" at the bedside as regards our fellow physicians. A fine "bedside manner" in the office, on the street, and even "off the record" is the medical man's finest attribute.

J. W. L.

In and Out of Focus

BY THE OBSERVER

Willing Hands

Many physicians in the District of Columbia have expressed their concern lest inadequate plans be made for physicians in the armed forces upon their return to civilian practice. Officers of the Society have given this matter considerable thought, as has the Committee on Medical Care, which has recently taken steps to ascertain the coöperation which might be expected from physicians remaining at home.

In a recent communication which the Committee directed to members of the Society, the necessity of being prepared to do everything possible for colleagues who find adjustment to civilian life difficult was stressed. Members were urged to indicate the manner in which they would coöperate with the Committee. They were reminded that a number of doctors in the services would find it difficult to find desirable offices upon their return. They were asked to state whether or not they would have space in their offices for one or more of the returning physicians; if not, if their offices could be used part time by them.

The response to these and other queries have now been tabulated. An analysis of the returns made by 73 physicians is, in this Observer's opinion, quite enlightening. Their replies to direct questions follow:

Willing to share office space with a returning physician	25
Holding office space pending the return of associates now in the services	14
Willing to stagger hours, making it possible for another physician to use their offices	10
Doctors unable to share offices because of lack of space	21
Willing to share office space until income of returning physician is established	3

Physicians who responded also made the following comments, among which were some interesting proposals:

“Will refer all calls after 11:00 p.m. to men in general practice returning from the service.”

“Will refer as much work to them as possible in otolaryngology, pediatrics, obstetrics.”

“Encourage group practice where feasible.”

“Suspend Society dues for first year.”

“Establish a sinking fund with $5.00 monthly [contribution] from members as a loan source . . . repayable to contributors [or an] outright gift to the fund.”

“Return . . . former patients . . . [where] possible.”

“Sponsor hospital refresher courses.”

“I feel that the U. S. Government should continue its medical officers on a half or other proportion of pay until six months after discharge.”

“Publish in the Annals or [publicize] by other means the names of doctors returning.”

“Form a committee whose only function is to aid returned men from the service.”

“Go on record approving reinstatement of all doctors to previous hospital appointments without loss of seniority. . . .” [This is being done by most hospitals.]

“Would advise that the Society write all physicians in the armed forces and prepare a roster of those desiring assistance in getting reëstablished. . . .”

“It is my own policy to mark conspicuously the records of patients who come to me whose . . . doctors are serving in the armed forces. These patients will be referred back to their respective doctors upon their return to practice.”

“Every physician should be able to take a vacation for at least two months and let a returning physician take over his practice and in that way get a start. I personally would sign such an agreement.”

“The Committee might inform itself concerning current leases and the date of expiration. . . so that proper contacts may be made at the earliest opportune moment. . . . Many returning physicians will, in this way, be afforded office space upon their return to private practice.”

“I have a guest room available in my home. I would consider it an honor to extend the courtesy [the use of the room] to a colleague until he could make permanent arrangements for himself and his family.”

“Postgraduate courses . . . pertaining to . . . [treatment of] patients under 18 and the problems of geriatrics.”

A number of the above suggestions are being considered by the Committee which will undoubtedly submit them for the Society's consideration at an early date. In the meantime, data already obtained will prove helpful when the Society is called upon by returning physicians.

★

"... We Believe in Self-Discipline..."

Concern is expressed in the February, 1944 issue of the *Ontario Medical Review* for physicians returning to civilian life. The *Review* says: "The reason is that the much publicised doctor shortage refers mainly to rural areas which before the war had difficulty in supporting a doctor. The temporary and artificial prosperity of wartime isn't sufficient to encourage men to settle either in these rural areas or near war industries."

The *Review* then points out that the number of Ontario doctors in active service is now 1,500. Before the war only 800 were needed to provide the medical services then required. It emphasizes that "wishful thinking will not solve this problem." It asks whether the public will be willing to pay for more services, both preventative and curative, thereby providing work for more doctors. A Gallup Poll revealed that 70 per cent of Canadians are in favor of the "compulsory collection of funds" for this purpose, and that the medical profession in Ontario is on record in favor of such an arrangement.

Neither the federal or provincial government, the *Review* says, appears to be in the mood for action. Neither is there public pressure for a change. Three reasons are advanced for this situation: "First, civilian doctors are making more money than ever before. Second, there is doubt whether a new plan should be adopted in the absence of doctors on military service. Third, all proposed plans [in Canada] allow for direct hiring of individual doctors by the state either through a department or a commission."

On this last point, the *Review* has the following comments to make:

"... the quality and quantity of service can quickly deteriorate if an administrative defect permits undue reduction of the remuneration, and this is exactly what history tells us will happen under the type of administration described in the Heagerty Bill and recommended by both the Canadian Medical Association and the Ontario Medical Association. Whether the doctor is paid by panel, fee, or salary, he is engaged on an individual basis by a state agency. This is not in the interest of the public or profession, because experience in other countries has invariably shown that while initially there is good remuneration to induce doctors to participate, the amount is soon whittled down resulting in underpay and poor service.

"The alternative to the divide-and-command principle is the unite-and-guide principle. Rather than submit, and even meekly recommend our submission, to the status of civil servants, the organized profession should courageously accept the duty and obligation of self-government. This is not only a desirable means, but an unavoidable necessity if disaster is to be avoided. Such a course of action would also eliminate our futile participation in struggles which we as a profession have no right to decide. It is not up to us to impose compulsory collection of medical fees on the people, or to stipulate how the fees shall be collected. It is not up to us to categorically state that a commission [the administrative body provided for in proposed legislation] would act more in the people's interest than does the Department of Health. It is not up to us, nor is it necessary for us, to demand that the chairman of the commission shall be a doctor or that the majority on the commission shall be doctors. But, when it comes to actually providing medical services, we can say very definitely 'This is our business. Mr. Minister (or Mr. Commissioner), your authority, we understand, is to survey the health needs within your jurisdiction, to estimate the services now provided, to plan for future developments, to expend the funds made available to you in the most efficacious way possible, to coördinate the various branches of the health services, to receive reports on services rendered, and to listen to appeals from the public. Any department or commission which undertakes tasks of this magnitude has its hands full. We, as the medical profession, represented by the Association, wish to be recognized as a subcommittee with whom you will contract for the medical services. We will discuss with you the extent of medical care required in return for a definite sum of money per person per month. We will agree with you on an amount and if, on annual or semi-annual review, it is found inadequate, we will expect more. If it is too much, we will agree either to extend

> the services or accept less money. The money should be paid monthly to the Association which will distribute it to the doctors. The profession itself should formulate any necessary regulations for the guidance of its individual members in providing medical care because we believe in self-discipline through a few wise rules wisely applied. We will mind our own business, namely the supplying of our own services, and will coöperate all along the line with the general administration through liaison representatives and joint committees.' "

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New Zealand's Medical Troubles

The two-year-old free medical service in New Zealand has become a national headache. War mobilization, according to an article appearing in the *New York Times*, has left that country short of doctors. In one region in the capital city there are 40,000 people without a single practicing physician, and in many rural areas the only available physician has volunteered for service in the armed forces, and replacement has been made very difficult.

"Coincidentally the rush for medical care now that service is free," the writer of this article reports, "is piling up big appointment lists and big incomes for civilian doctors. Dr. W. Newlands, a former member of the National Medical Council, recently charged that 'some medical men who cannot be called eminent received $50,000 each from the Social Security Fund last year.' This figure was said by a government official to be too high, but country doctors generally believe their city colleagues are getting handsome incomes for reduced service.

"Physicians back in New Zealand after years of service with the armed forces have been horrified at what they discovered here. One past president of the medical association described the situation to this correspondent as 'an awful racket' and said it must be cleaned up."

Doctors have been charged with granting certificates to physically fit workers drafted for military service pronouncing them unfit. In addition, it is charged that certificates covering ability to perform set jobs are often "unsatisfactory and were issued when doctors were not in a position to formulate any opinion on the nature of the job involved."

Commenting on the burden placed on the civilian doctors, the writer says:

> "Doctors have been so heavily dated up in their consulting rooms that there have been instances of refusal to go to cases which have proved fatal. Cases cited by Dr. Newlands included three physicians who he said were making incomes equivalent to seventy-three attendances on patients on every day of the year. If a doctor worked ten hours a day, he said, this meant he still had to see seven people an hour exclusive of his traveling time.
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> "This situation of over-consultation and markedly higher earnings for diminished service is generally admitted by medical men to exist. It was one of the developments anticipated by the National Medical Association when the free-doctor plan was proposed. It has apparently weighed with Prime Minister John Curtin's Australian non-party committee on medical care, which recently reported to the Australian House of Representatives that such systems as those in operation in New Zealand 'offered no solution to the problem and were subject to abuses which were very difficult to check.'
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> "The Australians reached this conclusion after hearing evidence from New Zealand health officials who were sent to their country to help frame a policy for a national medical service."

The National Medical Association of New Zealand is looking into the whole situation, for the article states:

> "Feeling that with free medical care established something must be done to place it on a better footing, the National Medical Association has created a planning committee which is studying the situation and preparing a blueprint of a set-up which will give better results. The doctors are convinced that a reasonable scheme can be operated only if political control is avoided. They believe that professional control of the whole field will enable them to check existing abuses, which they deplore.
>
> "The Administration has not yet shown its hand on the question of racketeering in medical fees, but there is said to have been a number of cases where payment has been refused to physicians judged to be giving inferior service."

Dr. Stone Goes to Town

It looked to your Observer like another field day for the critics of organized medicine. The South Agriculture Auditorium on the evening of April 7, 1944, was two-thirds filled, for the most part with enthusiasts for the Wagner-Murray-Dingell bill. As the meeting progressed it took on a competitive spirit with your Observer and two or three others very much in the minority.

The occasion was the Forum on National Health Insurance, sponsored by several organizations, among which were the Washington Newspaper Guild, the District of Columbia Coöperative League, Lawyers Guild, the American Federation of Labor, and the Association of Internes and Resident Students. The speakers were United States Senator James E. Murray of Montana; Dr. Joseph W. Mountin, Assistant Surgeon, United States Public Health Service; Mr. Robert Lamb, Legislative Representative, United Steelworkers of America, CIO; and Dr. Harvey B. Stone, of Johns Hopkins University School of Medicine. Presiding was Reverend Francis W. McPeck, Chairman of the Committee on Health, Washington Federation of Churches. There was a panel composed of representatives of various organizations; however, except for a few remarks at the close of the meeting, they had little or nothing to say.

Senator Murray held forth in the manner of one who is among good friends. No one could have made a stronger plea to the prejudices of his audience, nor a less logical one. In fact, his was the poorest presentation of the evening. Dr. Mountin was, as usual, constructive. Mr. Lamb, as might be expected, presented the CIO point of view. He made one surprising comment to the effect that while the CIO had endorsed the Wagner-Murray-Dingell bill, his union did not favor a medical service program being administered from Washington. He said that his group believed a decentralized service would be much more desirable.

The surprise of the evening was Dr. Stone, who proved himself capable of holding his own before any audience. Your Observer has heard many speakers present the medical profession's viewpoint on social and economic matters. Most of them have been sadly inadequate, particularly before lay audiences. Dr. Stone was the exception to this rule for his arguments were sound and ably presented. The audience was visibly impressed and displayed little enthusiasm for the comments of speakers favoring the Wagner-Murray-Dingell bill.

Dr. Stone speaks simply but very effectively. He is logical and realistic in his thinking. Your Observer was very happy to have had the privilege of being present on an occasion when a doctor speaking to laymen really "went to town."

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Demand vs. Need

One of the arguments which one hears advanced by physicians who are not enthusiastic about prepayment medical service plans is that there is no public demand for them. That is true; however, this is not the whole story by any means.

The truth of the matter is that honest observers—both medical and lay—agree that there is a need for better methods of distributing medical service than now exists. If this is so, the medical profession cannot escape its obligation to see to it that such methods are developed. As is well known, experiments are being conducted in various parts of the country. Experience to date indicates that the greatest task is that of "selling" the people on the need for health protection. This must be expertly done, and not a few physicians feel that it is an undertaking in which they should not engage. The fact is that if they do not assume this responsibility, others will do it to the detriment of their patients and themselves.

What inspired these comments is the experience with medical service plans now in operation. Those that have succeeded have done so at a cost of tremendous effort. In no instance was the public anxiously seeking coverage offered. People had to be shown its value to them and an intensive "educational" program was necessary.

Transportation to the A. M. A. Meeting

Many inquiries have been received at the Secretary's office regarding transportation to the meeting of the American Medical Association to be held in Chicago in June. Some physicians are apparently under the impression that special railroad rates will be in effect. However, this is erroneous, because no such arrangements are possible in wartime. In fact, not only are reduced rates out for the duration but directives of the Office of Defense Transportation prohibit the assignment of special cars or equipment for individual groups attending conventions, important though they may be.

The Secretary of the Society recently communicated with the General Passenger Agents of the Baltimore and Ohio and the Pennsylvania Railroads in Washington. He was informed that while the railroads are not in a position to make special arrangements, they will be pleased to assist with individual reservations. Uniform regulations of all railroads permit advance reservations for individuals thirty days prior to date of departure. This should be kept in mind by those who plan to attend the A. M. A. meeting and reservations should be made at the earliest possible moment. Should difficulties be encountered, it is suggested that doctors call the City Passenger Agent of either railroad—the B. & O. or the Pennsylvania.

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Fifth War Loan Drive

We can well be proud of the record of the professional group in the Fourth War Loan drive. The fine showing was due largely to the untiring efforts of Dr. W. Calhoun Stirling and his associates. The $750,000 quota agreed upon was exceeded by $27,000.

Chairman John A. Reilly of the District of Columbia War Finance Committee, commenting upon this exceptional performance, said that he was "very pleased to be able to announce that Dr. Stirling will again head this group for the Fifth War Loan."

"It is the opinion of men in the investment banking field," Mr. Reilly continued, "that the additions to the basket of securities for the Fifth War Loan drive make it the most complete ever offered. Leaders in the investment field recommend War Bonds as the best and safest investment in the world.

"There are hundreds of thousands of American boys who are fighting to preserve the American way of life and in addition investing a great percentage of their savings in War Bonds. Yet, all they ask of us is to back them up with the tanks, guns, ships and planes that our War Bond dollars buy. They only ask that we invest our money in America."

★

Nothing New About This

If there is a medical society where there are not some members who feel that a clique is running the organization, your Observer has never heard of it. Invariably, there are a few who look with skepticism on those who hold office. If they did not belong to the group which controls things, they ask, how could they be elected?

Now it is true that there have been a number of instances where cliques control medical organization. But in the opinion of your Observer this is not the rule. Usually offices are held by physicians who were elected without any strings tied to them and they try to do as good a job as possible.

In view of the universality of the charge that a few control the destinies of any organization, an editorial appearing in the April 15, 1944 number of the *Jackson County Medical Society Weekly Bulletin* (Kansas City, Missouri) is interesting and, yes, amusing reading. Dr. Vincent T. Williams who signs the editorial pulls no punches when he writes about "the gang that runs things." He says:

> "Whenever and wherever doctors get together, whether in hospital halls, in scrub-up rooms or in beaneries, this scurrilous chant crops up. If one accepted

(*Continued on page 212*)

War Section

SELECTIVE SERVICE'S MEDICAL SURVEY

Despite the large percentage of registrants rejected by the military services because they are potential mental cases, a startling number of unstable persons have been inducted. A short time ago an investigation was made of 2,500 veterans of the present war who had been discharged from the armed forces and returned to a certain state before August 1, 1942. Approximately 40 per cent were discharged because of mental and nervous disorders which had incapacitated them for military duty. Selective Service anticipated that approximately 100,000 men had been discharged from the armed forces during the calendar year 1943 for nervous and mental reasons.

It was this situation which made it imperative that further steps be taken to prevent persons not capable of adjusting themselves to the responsibilities of military life from being inducted. Last October Major General Lewis B. Hershey, Director of Selective Service System, announced that a project known as Medical Survey would be undertaken, the object of which was to prevent the induction of potential mental cases. The Survey has been going on for many months. However, comparatively few physicians are familiar with it and Selective Service officials have asked that the procedure adopted in making the Survey be briefly outlined for them so that when questioned they will have a knowledge of the facts.

Under the present plan, local boards are charged with the responsibility of gathering information concerning the medical and social history of registrants. Field agents have been appointed to work with each local board. These agents who are official representatives of Selective Service are trained medical and general social workers. They obtain information about registrants from various sources, sometimes seeking the help of physicians. All information is kept confidential and is available only to the psychiatrist at the induction center. It is exceedingly important that the data be as complete and reliable as possible so that injustice will not be done the registrant or the Government. Doctors can be of great help and are urged to respond to requests for information.

A MESSAGE FROM THE SURGEONS GENERAL OF THE ARMY AND NAVY

On the first anniversary of the Emergency Maternal and Infant Care program for the wives and infants of enlisted men, the following statement was issued jointly by Vice Admiral Ross T. McIntire, Surgeon General of the Navy, and Major General Norman T. Kirk, Surgeon General of the Army:

"On March 18, 1944, the Emergency Maternity and Infant Care program for the wives and infants of enlisted men in the four lowest pay grades of the armed forces of the United States will have completed its first year. Approximately a quarter of a million wives and infants will have been given care under the program. More than ninety per cent of this number are wives of enlisted men; nearly ten per cent are their newborn infants. Medical, nursing and hospital care is being made available in Army and Navy installations where it does not interfere with the care of the soldier and where it can be given without increasing existing facilities. Whatever other care is available in the place where the wife and infant are living is being given through the civilian authorities.

"Physicians the country over are contributing their medical skill to this wartime program generously and in return for moderate recompense. Hospitals the country over have opened their doors to these wives and their infants making available accommodations where their medical needs can be met adequately, though without luxury care. Nurses the country over are helping in the city and rural homes and in the hospitals.

"All this is being carried out voluntarily by those who are participating in the program. All this is being done in spite of the great shortage of physicians and nurses serving the civilian population—a shortage caused by the entry into the armed forces of thousands of our physicians and nurses.

"This program of maternity and infant care for wives and infants of enlisted men is made possible by grants from the Federal Government through the Children's Bureau of the Department of Labor and the State health agencies, for the purpose of relieving anxiety among the enlisted men as to how the costs of maternity care for their wives, or the costs of medical care for their infants, will be met in their absence from home while in the armed forces—when, for a great majority, their family income has been lowered materially. The program carried out by the State health agencies brings assurance to the enlisted men that their national and State governments are doing whatever is in their power to make care available to their wives and infants, that physicians throughout the country are helping.

"The morale in the armed forces is being raised and our fighting men go overseas with greater confidence in the security of their families because of this wartime program.

"We who are responsible for the health and medical care of the men in the armed forces are grateful to you—physicians, nurses, and hospitals—who are participating in this program of care for the wives and infants of these men. You are sharing with us our normal peacetime responsibility of caring for the families of our men, and so are making it possible for us to give our best efforts to the men themselves.

"Your contribution is an invaluable aid to us in the prosecution of the war, and we count on your carrying this program forward in the year to come with the same generous spirit you have shown in the past year."

Calendar of Meetings

April 4	Board of Censors
April 5	Procurement and Assignment Committee
April 12	Scientific Meeting of Society Committee on Medical Care
April 17	Committee on Postgraduate Education
April 24	Executive Board
April 26	Scientific Meeting of Society

MEMBERSHIP

The following applicants for membership were duly elected to membership at the business session, April 12, 1944:

Active Members

Ben D. Chinn, 1726 Eye Street, N. W.
Dorothy B. Holmes, 1150 Connecticut Avenue, N. W.
Shirley P. Leva, 1801 Eye Street, N. W.
Mortimer Ostow, Asst. Surgeon (R), U.S.P.H.S., Springfield, Mo.
Lawrence E. Putnam, 4834 MacArthur Boulevard
Joseph T. Roberts, Gallinger Municipal Hospital
Mark P. Schultz, 8 North Drive, Bethesda, Md.
Alfred J. Suraci, Major, M.C., U.S.A., Charleston, S. C.

Associate Members

Alice H. Kiessling, R.F.D. 2, Falls Church, Va.
Eugene A. Patovillet, 6201 20th Avenue, Brookside Manor, Hyattsville, Md.

The following applicants for membership were duly elected to membership at the business meeting, May 3, 1944:

Active Members

Dorothy E. Donley, Child Center, Catholic University
William J. Evans, 900 17th Street, N. W.
John L. Parks, Gallinger Municipal Hospital
Stephen F. Verges, 4800 16th Street, N. W.
S. Charles Woldenberg, 1726 Eye Street, N. W.

Associate Members

Bernard I. Dietz, D.D.S., 318 Bond Building
Arturo B. Rotor, 1617 Massachusetts Avenue, N. W.

The following applicants for membership will be voted on at the business session, October 11, 1944:

For Active Membership

Russell F. Cahoon, University of Pennsylvania—1934
Frank S. Caprio, George Washington University—1931
Gottfried Karl Duschak, University of Vienna—1920
John R. R. Ewan, Jefferson Medical College of Philadelphia—1937
James J. Feffer, Indiana University—1938
Arnold H. Gould, University of Arkansas—1942
Benjamin Karpman, University of Minnesota—1920
Gerald H. McAteer, Georgetown University—1937
Russell C. Payne, George Washington University—1939
William R. Perkins, Jr., George Washington University—1943
J. Ross Veal, University of Pennsylvania—1928

For Associate Membership

Ruth E. Standard, College of Medical Evangelists, Calif.—1941
Ruth E. Stocking, University of Chicago—1932

On The Home Front

The Ninety-fourth Annual Session of the American Medical Association will be held in Chicago, June 12–16, 1944. The House of Delegates will convene at 10 a.m., Monday, June 12, in the Red Lacquer Room of the Palmer House.

The Scientific Assembly of the Association will open with a general meeting, Tuesday, June 13, at 8 p.m., at the Palmer House. The registration desk will be located in the Hotel Stevens and will be open from 8:30 a.m. until 5:30 p.m.

The Scientific Exhibit will be situated on the fourth floor of the Palmer House. The Technical Exhibit will occupy the lower level and second floor areas of the Stevens Hotel.

A large delegation from Washington, including **Dr. Coursen B. Conklin,** the Society's Delegate, and **Theodore Wiprud,** Secretary of the Society, will attend the meeting.

The first lecture in the **Postgraduate Course on Psychosomatic Medicine,** sponsored by the Committee on Postgraduate Education of the Medical Society of the District of Columbia, was held Monday evening, May 1, in the Society's auditorium. Dr. Edward Weiss, Professor of Clinical Medicine, Temple University School of Medicine, spoke to a capacity audience on the subject, "Psychosomatic Aspects of Cardiovascular Disease." Dr. Joseph C. Yaskin, Professor of Neurology, Graduate School of Medicine, University of Pennsylvania, also addressed a large audience, May 8, on "The Psychosomatic Aspects of Gastrointestinal Diseases."

Two more lectures in the series will follow. Dr. Foster Kennedy, Professor of Clinical Medicine (Neurology), Cornell University Medical College, will speak Monday, May 15, at 8:15 p.m. on "War Neuroses as Related to Psychosomatic Medicine." The final lecture will be given May 22 by Dr. George W. Kosmak, member of the American Board of Obstetrics and Gynecology. His subject will be "The Psychosomatic Aspects of Gynecology."

The National Naval Medical Center, Bethesda, Md., is endeavoring to collect for its archives a complete set of commissions issued to naval medical officers and signed by past Presidents of the United States. Any individuals having in their possession such old commissions are invited to send them to the Center to become a part of a permanent collection. Communications regarding such contributions should be directed to Dr. Robert C. Ransdell, Bureau of Medicine and Surgery, Navy Department, Washington 25, D. C.

The Fifth Pan American Conference of National Directors of Health was held in the Pan American Union Building, April 24–29. Dr. Thomas Parran, Surgeon General of the U. S. Public Health Service, Dr. Hugh S. Cumming, Director of the Pan American Sanitary Bureau, and Dr. Leo S. Rowe, Director General of the Pan American Union, were among the speakers. Representatives of the national public health services of 21 American republics were in attendance. Dr. Cumming was elected President of the Conference.

The Section on Neurology and Psychiatry met at Children's Hospital, April 13. Dr. Herbert H. Schoenfeld discussed "Microcephalus" and Dr. Leonard M. Dub, "Juvenile Schizophrenia."

The Section on Gastroenterology held a dinner meeting at the Wardman Park Hotel, April 3. Captain Alphonse McMahon, M.C., U.S.N.R., was the guest speaker; his subject, "Field Gastroenterology." Lt. Colonel Thomas T. Mackie, M.C., U.S.A., led the discussion. New officers were elected as follows:

Dr. William M. Ballinger, *Chairman;* Dr. Fred A. J. Geier, *Vice Chairman;* Dr. Robert Sterling McGrath, *Secretary-Treasurer.*

The Washington Ophthalmological Society met April 24 in the Medical Society's building. Dr. Benjamin Rones read a paper on "Relationship of German Measles to Congenital Ocular Diseases." Participating in a panel discussion on simple glaucoma were Drs. Edward J. Cummings, Louis S.

Greene and John W. Burke. Mrs. Helenor Campbell Wilder presented an exhibit on "Granulomas of the Eye and Adnexa" from the Army Medical Museum. The program closed with case presentations by Drs. Ronald Cox, John R. Lloyd, C. R. Naples and Richard Wilkinson.

The George Washington University Medical Society held its sixth meeting of the year, April 22. Captain Alphonse McMahon, M.C., U.S.N.R., of the Division of Medicine, U. S. Naval Hospital, related recent experiences in the South Pacific Theatre where he established the first Base Hospital. He was decorated by Admiral Halsey for meritorious service.

The Clinico-Pathological Society held a dinner meeting at the Statler Hotel, May 2, with Dr. Prentiss Willson as host. A brief talk was given by Vice Admiral Russell Willson, of the Strategic Committee, Joint Allied Chiefs of Staff. Dr. James P. Leake, Medical Director, U. S. Public Health Service, discussed "Small Pox."

Dr. John Allan Talbot was host to the Society, April 4, at the Metropolitan Club. Colonel John T. King, M.C., U.S.A., discussed "Cardiac Disorders Encountered in an Army General Hospital."

Participating in the program of the **War Session of the American College of Physicians,** held at the Palmer House, Chicago, March 31 and April 1, were several Society members. Major General David N. W. Grant, M.C., U.S.A., The Air Surgeon, opened the War Session, April 1, with an address on "Aerial Transportation of the Sick and Wounded." Vice Admiral Ross T. McIntire, Surgeon General of the Navy, discussed "The Great Need for Internists in the Navy Medical Program." Captain Don S. Knowlton, M.C., U.S.N.R., Camp Surgeon at Camp Lejeune, New River, N. C., spoke on "Medical Men in the Solomons."

All officers of **Emergency Hospital** were reëlected to office at the annual meeting of the Board of Directors, April 27. Stanley D. Willis continues as President, Dr. Henry L. Darner as Secretary, and J. G. Capossela as Superintendent. Serving on the Board of Directors for the coming year are the following members of the Society:

Drs. William Earl Clark, Henry L. Darner, H. A. Fowler, Harry M. Kaufman, Joseph Kreiselman, Guy W. Leadbetter, William B. Marbury, James F. Mitchell, Daniel B. Moffett, A. B. Moore, John W. Warner, James N. Greear, Jr.and John H. Lyons. The last two are on leave of absence with the armed forces.

Five former Board members were honored for their service to the Hospital by being named honorary Board members. Among them were Dr. William B. Mason and Dr. Thomas E. Neill.

April, the National Cancer Control Month, was observed this year by eight hospitals which established special cancer diagnostic clinics in coöperation with the District Health Department. These hospitals were Casualty, Gallinger, Georgetown, Providence, George Washington University, Garfield, Veterans' Administration, and Freedmen's.

The number of deaths in the District resulting from cancer have increased from 664 in 1930 to 1,195 in 1943. The cancer death rate is now 132.8 per 100,000 population, the second highest mortality cause in the District. These figures were released by Dr. George C. Ruhland, District Health Officer.

The Executive Committee of **Columbia Hospital** voted April 7 to close one of its surgical wards because of a shortage of nurses, leaving only one ward in this department. Colonel N. L. McDiarmid, Superintendent of the Hospital, stated that the depleted staff had been enabled to function because of the help given by the Red Cross aides, but that these volunteers are limited in number and are not available at all hours. By closing the one surgical ward the other wards will be better staffed. Curtailment of obstretical facilities, he said, may be necessary unless the present minimum staff can be maintained.

The cornerstone for the **new cadet nurses' building of Children's Hospital** was laid April 11. Dr. Thomas W. Parran, Surgeon General of the U.S. Public Health Service, officiated during the ceremonies.

A three-story building is scheduled for completion in July. Quarters will be provided for 66 nurses, who will receive a three-months' course in pediatric training. The project is being financed by an FWA grant of $93,000 and a $50,000 loan.

Dr. Joseph S. Wall, President-elect of the American Academy of Pediatrics, received the tribute of fellow members of the American Academy of Pediatrics and colleagues in other fields of medicine at a testimonial dinner at the Mayflower Hotel, April 14. He was presented with a scroll. Among those who spoke in praise of Dr. Wall's contribution to the field of pediatrics in Washington were Dr. Thomas Parran, Surgeon General of the U. S. Public Health Service; Dr. Fred R. Sanderson, President of the Medical Society of the District of Columbia; Dr. Walter A. Bloedorn, Dean of George Washington University School of Medicine; Rev. David V. McCauley, Dean of the Georgetown University School of Medicine; Mr. Charles D. Drayton, President of the Board of Directors of Children's Hospital; Dr. Preston A. McLendon and Dr. John A. Talbot.

Dr. Wall

Dr. Wall has been a practicing physician in Washington for 44 years. He graduated from Georgetown University School of Medicine in 1897 and joined the faculty soon thereafter. Since 1912 he has been Professor of Pediatrics and in 1932 was promoted to the head of that department and to the executive faculty.

In 1926 Dr. Wall was President of the Medical Society. Since that time he has held many other offices in the Society. At present he is serving on the History Committee. He has also been active in the American Medical Association, the American Child Health Association and the Washington Academy of Sciences. He is a member of the Advisory Committee on Maternal and Child Health of the Children's Bureau and is Chairman of the Medical Staff of Children's Hospital.

Among those who were present at the dinner were Dr. Oliver L. Stringfield of Stamford, Conn., Regional Chairman of the Academy; Dr. Edgar P. Copeland, Chairman of the Academy in the District of Columbia, who presided, and Drs. William F. Burdick, McLendon and William S. Anderson who were in charge of arrangements.

The 1943 Annual Report of the District of Columbia Chapter of the National Foundation for Infantile Paralysis, Inc., shows total receipts of $55,518.25, of which $54,576.12 represented the Chapter's share of the proceeds of the 1943 Celebration of the President's Birthday.

Among the persons transferred from Active to Honorary Membership in the Chapter were Drs. H. Lynn Colvin, M. Russell Edmonston, Custis Lee Hall and Guy W. Leadbetter. Dr. Frank M. Hand accepted appointment as an Active Member.

WPB restrictions on physical therapy equipment eased:—Types of equipment that may now be manufactured and sold to hospitals, medical departments of industrial concerns, medical practitioners, and to distributors for delivery to these and other specified users, include electric bakers, fever cabinets, galvanic generators, low voltage generators, magnetic field generators, medical diathermy units, passive vascular exercise apparatus, surgical diathermy units, ultra-violet radiation equipment and whirlpool baths.

Three types of equipment, i.e., electric bakers, infra-red generators and ultra-violet radiation equipment, may be sold or rented to the public upon written prescription of a medical practitioner licensed to use physical therapy equipment.

Dr. Oscar B. Hunter read a paper on "Atypical Leukemia and Leukemoid Reactions" before the St. Louis Medical Society on Southern Medical Association Night, April 4. At this meeting members of the Executive Committee of the Council of the Southern Medical Association, of which Dr. Hunter is Chairman, presented the program.

Dr. Hugh Davis has been appointed a member of the Advisory Committee for the Summer Round-up of Children for the District of Columbia Congress of Parents and Teachers, representing the Medical Society.

Among the speakers at the **Sixteenth Annual Postgraduate Meeting of the Mahoning County Medical Society** at the Pick-Ohio Hotel, Youngstown, Ohio, April 19, were **Dr. J. Ross Veal,** who read papers on "Surgery of Thrombosis of Peripheral Veins" and "Acute Obstruction of the Small Intestine," and **Dr. Eugene R. Whitmore,** who spoke on "Postwar Problems of Tropical Medicine in Civilian Practice."

Dr. Henry C. Macatee and Dr. William P. Herbst have been named as delegates to the Council of Social Agencies representing the Society for the ensuing year. Their appointments were approved by the Society at its Annual Business Meeting, May 3.

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, and **Lt. Colonel William Menninger,** Chief of the Division of Neuropsychiatry of the U. S. Army, were selected to give the Fifteenth Annual Stuart McGuire Lecture Series at Richmond, Virginia, April 5 and 6. The Lectures were held jointly with the Spring Postgraduate Clinic of the Medical College of Virginia.

Dr. Wallace M. Yater has been appointed by Dr. James E. Paullin, President of the American College of Physicians, to succeed Dr. O. H. Perry Pepper as the official representative of the College in the Division of Medical Sciences of the National Research Council for a period of three years beginning July 1, 1944.

Dr. Radford Brown, Professor of Obstetrics and Gynecology of George Washington University School of Medicine, will succeed **Dr. Herbert P. Ramsey** as Acting Executive Officer of the Department of Obstetrics until August 31. Dr. Ramsey recently resigned his position but will remain on the staff as Clinical Professor of Obstetrics and Gynecology.

Drs. Joseph Kreiselman and Leon Gerber have been added to the staff as Clinical Instructors in Surgery.

Dr. R. Lomax Wells became the Medical Director of the Chesapeake and Potomac Telephone Company on May 1, 1944. Dr. Wells succeeded **Dr. W. Cabell Moore,** who had held the office since March, 1922. Dr. Moore, one of the pioneers in industrial medicine, will continue in private practice. He is a member of the original Draft Appeals Board of the District of Columbia.

Dr. Wells has been associated with Dr. Moore at the Telephone Company since 1936. Both physicians graduated in medicine from the University of Virginia and have been active in medical affairs in Washington for several years.

Major General David N. W. Grant, The Air Surgeon of the Army Air Forces, was elected an Honorary Member of the Medical Society of the District of Columbia at its annual business meeting, May 3, 1944.

Dr. William Thornwall Davis and Dr. Frank D. Costenbader were among the guest speakers at the Annual Postgraduate Course in Ophthalmology given at the University of Michigan, Ann Arbor, April 20–22, 1944. Three lectures were presented by Dr. Davis on "The Vertical Anomalies of the Eye." Dr. Costenbader gave one lecture on "Applied Physiology of the Extraocular Muscles" and two on "Nonsurgical Treatment of Squint."

Dr. J. Winthrop Peabody, President of the American College of Chest Physicians, addressed a joint meeting of the Minnesota State Medical Association and the Northwest Regional District, American College of Chest Physicians, held in Rochester, Minn., April 13–15. His paper was entitled "Transitory, Migratory Pulmonary Infiltrations Associated with Eosinophilia."

He also spoke before a joint meeting of the Indiana Chapter of the American College of Chest Physicians and the Kentucky Chapter of the College, in Louisville, Ky., April 16.

Captain Don S. Knowlton, M.C., U.S.N.R., addressed the annual dinner meeting of the Minnesota State Medical Association on April 14.

Dr. Herman E. Hilleboe, Director of Tuberculosis Control, U. S. Public Health Service, spoke on "Tuberculosis Control in Wartime" at the annual meeting of the Montgomery County Tuberculosis Association, April 11.

Dr. Norvell Belt was guest speaker at a joint meeting of the Alexandria Tuberculosis Association, the Alexandria City Medical Society and the Alexandria Department of Health, April 28. His subject was "Renal Tuberculosis."

Mr. Theodore Wiprud spent April 21 and 22 in Detroit in conference with Mr. Jay C. Ketchum, Executive Director of the Michigan Medical Service. He was joined on April 22 by **Dr. Frank D. Costenbader**, Chairman of the Society's Committee on Medical Care, and by **Dr. Herbert P. Ramsey**, who was interested in gaining a first-hand impression of the prepayment medical plan in Michigan.

Dr. Emil J. C. Hildenbrand addressed the Dorchester County Medical Society at Cambridge, Maryland, April 28. His topic was "Peripheral Vascular Emergencies; Diagnosis and Treatment."

Dr. Guy Leadbetter addressed the Nebraska State Medical Association at Omaha, May 4, on the subject, "The Problem of the Fractured Hip."

Dr. Samuel M. Dodek has been reëlected State Vice President for the District of Columbia of the Alumni Association of Jefferson Medical College of Philadelphia. This will be his third consecutive year in this office.

BOOKS RECEIVED FOR REVIEW

Handbook of Nutrition. A Symposium prepared under the auspices of the Council on Foods and Nutrition of the American Medical Association. Pp. 586. Chicago: A. M. A., 1943.

Synopsis of Diseases of the Heart and Arteries, 3rd ed. George R. Herrmann, M.S., M.D., Ph.D., F.A.C.P., Professor of Medicine, University of Texas. Price, $5.00. Pp. 516. St. Louis: Mosby, 1944.

Industrial Ophthalmology. Hedwig S. Kuhn, M.D. Price, $6.50. Pp. 294. St. Louis: Mosby, 1944.

Virus Diseases in Man, Animal and Plant. Gustav Seiffert. Price, $5.00. Pp. 223. New York: Philosophical Library, Inc., 1943.

Synopsis of Neuropsychiatry. Lowell S. Selling, M.Sc., M.D., Ph.D., Dr.P.H., Director, Psychopathic Clinic, Recorder's Court, Detroit, Michigan. Price, $5.00. Pp. 500. St. Louis: Mosby, 1944.

A Dynamic Era of Court Psychiatry, 1914–1944. Agnes A. Sharp, M.A., Ph.D. Pp. 149. Chicago: Psychiatric Institute of Municipal Court of Chicago, 1944.

Studies from the School of Medicine of George Washington University for 1942–1943. Washington, D. C., 1943.

Elements of Medical Mycology. Jacob Hyams Swartz, M.D., Assistant Professor of Dermatology, Harvard Medical School and the Postgraduate School; Member, American Dermatological Association, American Mycological Association; Dermatologist, Massachusetts General Hospital. Price, $4.50. Pp. 179, with 80 illustrations. New York: Grune & Stratton, 1943.

BOYD RICHARD READ, M.D.

1889–1944

Dr. Boyd Richard Read, an Active Member of the Medical Society of the District of Columbia, died April 13, 1944, at Providence Hospital after an illness of several months. He resided at 537 Quintano Place, N. W.

Dr. Read was born in Dubois, Pennsylvania, February 15, 1889. He had lived in Washington since he was six years of age and attended Central High School. In 1912 he received his degree in medicine from George Washington University. For a brief period of eleven months, when he was associated with the United States Indian Service, he practiced at Lower Brule, South Dakota. During thirty years as a general practitioner he was situated in the District of Columbia. He maintained his office at 3220 Connecticut Avenue, N. W.

Dr. Read became an Active Member of the Medical Society of the District of Columbia in 1914. He was a Fellow of the American Medical Association and a member of the George Washington University Medical Society.

Surviving are his wife, Mrs. Elizabeth Riordan Read; two sons, Sergeant William A. Read, serving in the Army overseas, and Boyd Richard Read, Jr.; a stepson, James Allens Higgins; and a brother, Dr. Charles C. Read, all of Washington.

(*Continued from page 189*)

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24. Hunter, W. C., Sneeden, V. D., Robertson, T. D., and Snyder, G. A. C.: Arch. Int. Med., 1941, 68, 1.
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27. Homans, J.: New England J. Med., 1943, **229**, 309.
28. Ochsner, A.: Surgery, 1939, **6**, 129.
29. Veal, J. R., and Hussey, H. H.: Am. Heart J., 1943, **25**, 355.
30. Veal, J. R., and Hussey, H. H.: Personal communication.
31. Castleman, B., cited by Welch and Faxon (see ref. 26).
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33. Priestley, J. T., Essex, H. E., and Barker, N. W.: Proc. Staff Meet., Mayo Clin., 1941, **16**, 60.
34. Murray, G. D. W.: Brit. J. Surg., 1940, **27**, 567.
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37. Crafoord, C., and Jorpes, E.: J. A. M. A., 1941, **116**, 2831.
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42. Wright, I., and Prandoni, A.: Ibid., 1942, **120**, 1015.
43. Shapiro, S., and Sherwin, B.: N. Y. State J. Med., 1943, **43**, 45.
44. Zucker, H. D.: J. A. M. A., 1944, **124**, 217.
45. Davidson, C. S., and MacDonald, H.: New England J. Med., 1943, **229**, 353.
46. Shapiro, Shepard, Sherwin, B., and Gordimer, H.: Ann. Surg., 1942, **116**, 175.
47. Hirschboeck, J. S., and Coffey, W. L., Jr.: J. A. M. A., 1942, **118**, 1161.
48. Hirschboeck, J. S., and Coffey, W. L., Jr.: Am. J. M.Sc., 1943, **205**, 727.
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(*Continued from page 195*)

additional county and local tuberculosis associations, and the coördinating and guiding of the efforts of the various volunteer and official community agencies to prevent duplication are only a few of the numerous ways in which the volunteer association is helping in the control of the disease.

In times of war there is practically always an increase in the incidence and mortality from tuberculosis. Since World War II began there has already been a 12 per cent increase in the tuberculosis death rate in England. If the medical and lay forces of our country will apply the knowledge which we already have and make the best use of the facilities which are already available I believe the mortality trend in this country will still be downward.

(*Continued from page 204*)

these disgruntled mutterings and *sotto voce* rumors he would believe every Medical Society harbors some cabalistic group with sinister and esoteric motives."

"Whence comes this unpleasant connotation about 'the gang that runs things'? Could it be there is no such? Could it be the majority of members are too lazy or too indifferent to acquaint themselves fully with the numerous problems being presented which must be answered by someone, if the Society is to carry on? Could it be these covert, disparaging whisperings are merely obliquely jealous or deliberately insidious slanders cast at those who are doing their best?

"The answers to these queries are legion. Most members do not attend meetings; many do not follow current medical literature (except to answer questions of patients who have read the Reader's Digest); and the future of our profession apparently does not concern many members. Yet those who do participate in the Society's affairs 'are wasting their time,' are maligned for being 'the gang that runs things'!

"Let us cite one member as an example of those who do the work in our organization. Upon this member many duties have been dumped. Certain of these chores have been the unpleasant, ornery variety—cajoling, haranguing, badgering solicitations and arrangements. Yet this member never fails to accept these assignments and they are always carried out. Some say he is a chump, 'always has his finger in everything.' Others aver that 'if he had much business, he wouldn't have enough time.' Still others question, 'what's he running for?'

"No one denies that some few apparently thirst for the power or prestige of office or committee appointment, for that reason alone, even if they do not actually serve. Nevertheless, the next time you hear these grumblings and grouchings, brother, determine what constructive effort the criticizer has effected for the Society. What suggestions or ideas (no matter how goofy) he has ever advanced, other than to a few cronies or to his office-girl. Suggest that he put on paper his surefire panaceas and send them in to 'the gang that runs things.' "

My, oh my, Doctor, you surely pack a mean wallop.

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *June, 1944* NUMBER 6

THE TREATMENT OF WAR WOUNDS*

FRENCH ROBERT MOORE, M.D., F.A.C.S.
Captain, Medical Corps, United States Navy; Medical Intelligence Officer and Liaison Officer for Marine Corps, Bureau of Medicine and Surgery

THE medical officers with combat field units have the finest opportunity of all groups in the combat zone to do surgery. It is with the combat units that abdominal wounds must be operated on if the patient is to survive. Wounds of the head, face, neck, chest and extremities, amputations, and spinal injuries must be properly treated and prepared for evacuation. Therefore, medical officers assigned to the various combat units have the opportunity to perform a greater variety of surgical procedures than those attached to the hospitals in the rear areas. Because of this a medical officer must have a clear conception of the treatment of the many types of war wounds encountered.

In order to provide the best care for the wounded, all personnel, from the corpsmen in the front line through the chain of evacuation, battalion aid station, and regimental air station to the field hospital, must be thoroughly instructed in the treatment of all types of wounds so that they may function as one team.

Hospital corpsmen are drilled not to expose themselves to fire. These front line corpsmen are the real heroes in our organization. At Tarawa many wounded were rescued from dangerous positions by a corpsman; crawling along behind whatever protection he could find, pushing a flat litter in front of him, and protected by machine-gun fire, he would roll the patient onto the litter and drag it out after him.

All medical personnel are taught to give plasma, perform proper splinting, clamp large bleeders including the clamp in the dressing, avoid the use of tourniquets, and thoroughly apply sulfanilamide powder to all parts of the wound. In addition, and this is important, we insist that no patient be evacuated to the rear until the initial shock is counteracted by plasma. In evacuation, abdominal wounds are given priority, next chest wounds, then head, neck and extremities, in that order. Plasma is given in company aid stations, which may be in a hole, behind a tree stump, or any place that will give some protection. Jeep ambulances are used far forward, and when the front line is on a ridge many drive within a few yards of the casualty and thus save much time in evacuation. In the severely wounded, plasma is continued in the jeep ambulance. By counteracting shock, if possible, before evacuation, the patient arrives at the field hospital in good condition, and not in irreversible shock. Hence plasma is used in considerable amounts before the patient ever arrives at the hospital. It is really "the life-saving fluid." Combat wounds most frequently encountered include:

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* Read before the Georgetown University Medical Alumni Club, March 20, 1944.

1. Extremities
    a. Flesh wounds
    b. Compound fractures
    c. Large wounds involving bone and blood vessels requiring amputation
    d. Traumatic amputation, from
        (1) Large caliber missiles (artillery, mortars)
        (2) Shell fragments
        (3) Hand grenades
2. Head, face and neck
3. Chest
4. Abdomen, or combination of chest and abdomen
5. Pelvic
6. Genito-urinary tract
7. Spine
8. Burns. In a large number of naval casualties we treated at various times, burns often headed the list in combination with other types of wounds.

Basic Principles of the Treatment of War Wounds

1. Unattached bone, loose bodies, such as bullets, shrapnel fragments and clothing and any foreign material, such as splinters, pebbles and coral, are removed.

2. No débridement is done except badly devitalized tissue. Use sharp scissors for this.

3. The wound is cleansed with soap and water or saline and glucose.

4. All bleeders, both above and below, are ligated and the vessels divided. This prevents secondary hemorrhage by retraction of vessels.

5. In nerve injuries the ends of the nerve are approximated with black silk. Most nerve injuries occur in wounds of the extremities, in which there is a compound fracture with loss of tissue. These wounds are immobilized by plaster or splinting to include the joints above and below the wound in a position of maximum relaxation.

6. Sulfanilamide powder is applied to war wounds after cleansing, using a gloved finger or instrument to spread the powder into every part of the wound. In a deep, penetrating or through-and-through wound of the soft tissue of the thigh or buttocks, a catheter is used to instill a 2½ per cent sulfathiazole solution. In deep, open wounds, the base and side walls are lightly packed with gauze strips saturated in 5 per cent sulfathiazole ointment.

7. Wounds are not sutured except to control hemorrhage. Face wounds are the only exception.

8. All extensive soft tissue wounds, even without fracture, are immobilized.

9. Morphine is given in adequate doses but is not given in ½-grain dose to the slightly wounded since this may make them stretcher cases.

10. For shock, plasma, blood, and saline and glucose solution are used in large amounts. If necessary, a four-way infusion is given. Blood must be used after plasma in the severely wounded, because of the large loss of blood. Four-way infusion in severe shock is life-saving. In this four-way infusion, plasma is given in each arm and one leg, and saline and glucose in the other leg. While this is going on, the blood is made ready. In severe gunshot wounds involving kidneys, liver, chest and abdomen, as much as 12 units of plasma, 1,000 c.c. of saline and glucose solution and 10 to 12 pints of blood were given in a period of 2 to 3 hours.

11. Sulfonamides are given for all severe wounds, either orally, intravenously or rectally.

Treatment of Various Wounds

Gunshot wounds of the extremities are the wounds most often seen. The bones are shattered and there is a large loss of tissue, particularly at the exit of the missile. The patients are first treated near the front line by a corpsman who gives morphine, sulfanilamide powder in the wound, applies dressing and splint and gives plasma. During evacuation to the field hospital, additional plasma is often given and the splint and dressing checked. A casualty arrives at the field hospital 1 to 3 hours later, where a medical officer, wearing a mask, examines the wound, does a cleansing débridement, ligates vessel and approximates nerve ends; and using a gloved finger, makes an emulsion of the sulfa drug with blood and serum which is applied to all parts of the wound and ends of bone, and then dresses the wound. Reduction and alignment are easily accomplished because of the paralyzing effect on the extremity of the high velocity bullets. Casts are applied, first a posterior splint, followed by circular plaster. When a large number of wounded are being received, Thomas splints are used only for immobilization, reduction and casts come later. In using Thomas splints, only light traction is applied, because an overtight clove may cause an unnecessary amputation. All casts applied to arm or leg are split down the center to the stockinet. If numbness or cyanosis appears, the cast is immediately separated.

In amputation, the guillotine procedure is used. We save as much soft tissue and bone as possible. Vessels are ligated, sulfanilamide powder is used freely, and the wound is covered by 5 per cent sulfathiazole ointment gauze. All amputations were supported by splinting or a cast extending beyond the stump a few inches.

Gunshot wounds of the head, both penetrating and compound types, are encountered. The wound is cleansed with saline and/or soap and water. Alcohol or iodine is not applied. Loose bone fragments or shell fragments are removed but care is taken to avoid hemorrhage in doing so. The wound is dusted with sulfanilamide powder and sulfanilamide ointment gauze dressing is applied. The head is elevated and sulfa drugs are started by any method possible.

For wounds of the face the usual cleansing débridement is done, followed by local application of a sulfa powder. Then the skin edges are approximated with dermal or silk sutures. These wounds are not closed under tension. In wounds opening into the mouth mucous membrane is stitched to the skin. When the mandible is involved the dental surgeon comes into his own. All tissue and bone possible must be preserved and the face contour maintained.

Lacerations of the scalp by gunshot wounds are more frequent than is imagined. Because of the excellence of the helmets now in use, the bullet is often deflected so that instead of penetrating the skull it merely grooves the scalp. These wounds are cleansed with soap and water, sulfa powder applied, and wound edges, if widely separated, are approximated only. They must not be closed. In all wounds of the scalp, the skull is investigated to see if it has been damaged.

Neck wounds are not uncommon. The anterior-posterior wounds, if not too near the midline, seldom strike vital structures and cause little trouble. The transverse and midline wounds usually end fatally because large vessels are struck. Tracheotomy tubes are used frequently in these cases and often prove lifesaving.

If the gunshot wound of the chest is centrally located, the patient usually dies. If the bullet's entrance is near the outer border of the chest, he undoubtedly will recover. At the front line these wounds are immediately sealed by gauze and adhesive. If respiratory embarrassment occurs, aspiration is done immediately. This embarrassment is usually caused by hemothorax and rarely by pneumothorax. Aspirations of the chest are frequently done in battalion or regimental aid stations. Only enough blood or air is removed to relieve the immediate situation. These cases are then treated for shock in the usual manner and the men are kept quiet for a week or 10 days, if possible, before evacuation to a base hospital.

Wounds of the abdomen are seen less often than chest wounds, because a man in combat is usually bent forward. Because of this position the bullet may enter the lower chest, strike a rib and be deflected down, where it may damage the liver, spleen, kidneys or any of the abdominal organs. Of course, in some wounds of the chest or abdomen, a large vessel is hit, and the man dies before anything can be done for him. But this is not always the case, and by the use of plasma from the front line back to the field hospital, these patients arrive in fairly good condition. Then, if necessary, the 4-way infusion is used, and in many cases 10 to 12 units of plasma followed by 8 to 12 pints of blood are given in a period of 2 to 3 hours, at which time the patient is ready for surgery. If we did not have plasma in large amounts to give these patients while blood is being collected and matched, many of these severely wounded would not survive.

Illustrative Cases

Case 1. A marine was wounded in the lower chest. The bullet was deflected down through the liver, shattered the right kidney, struck the fourth lumbar vertebra, and left by a large wound in the right flank. By the use of plasma from the front line to the field hospital, the patient arrived still alive, but nearly pulseless. The 4-way transfusion was immediately started. In all, the patient received 12 units of plasma, 11 pints of blood and 1,000 c.c. of saline and glucose in 2½ hours. After the blood pressure stabilized, a right nephrectomy was done, a strip of muscle was cut and placed in the liver wound, and the liver wound and diaphragm were closed by mattress suture; a handful of sulfanilamide powder was then placed in all parts of the wound, and the wound was closed with a drain. Three units of plasma and 2 pints of blood were given postoperatively, and the patient had an uneventful convalescence.

Case 2. An aviator whose plane was damaged landed in the water just off the beach from one of our field hospitals. Some sharp object cut a large ragged wound extending on the left side from the spine around nearly to the navel. He arrived at the hospital 20 minutes later with a shirt jammed in the wound. He was nearly pulseless. The 4-way infusion was started and the patient received 12 units of plasma and 10 pints of blood within a period of 2 hours. A hemi-nephrectomy was done, as the lower pole of the kidney was nearly torn off. The descending colon was cut nearly in half. This was brought up and extraperitonealized. Plasma and blood were given postoperatively, and the patient made a good convalescence.

Simple perforations of the small intestines are merely closed. When two or more perforations are found in the same area an end-to-end anastomosis is performed and the intestine extraperitonealized.

Wounds involving the sigmoid, bladder and small intestine are the most difficult encountered. In these cases the bullet usually enters the buttocks region and, striking the pelvis, flattens out, tearing a large opening in the sigmoid, bladder, and occasionally involving the small intestine. Fortunately, these cases are few. In most cases of the intestinal tract, except single perforations of the small intestine, the intestine is extraperitonealized. The skin and subcutaneous tissues are left open about the incision. At first, the usual type of colostomy or cecostomy was performed, but later subcutaneous abscesses developed which endangered the fixation of the intestine. Postoperatively a Levine tube is used in all abdominal cases.

Wounds involving the bladder, genitalia and lower urinary tract are rare. Suprapubic cystotomy is performed in most wounds of the lower urinary tract. Injuries to the ureter are the rarest of all, and were found only once in a wound involving the sigmoid, bladder and ureter. The patient received a colostomy and cystotomy, and the ureter was transplanted to the skin, because a large portion had been destroyed. This patient failed to survive.

Spinal wounds occur rarely without damage to the kidneys or other abdominal contents. We had 3 spinal wounds that involved no other structures: 1 of the fourth dorsal, 1 of the tenth dorsal, and the other of the second lumbar. Laminectomies were done in each case. Two of the patients had contusions of the cord with

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A CLINICIAN LOOKS AT THE PRESENT-DAY TREATMENT OF MALARIA*

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UNDER the auspices of the National Research Council and the Association of American Medical Colleges, I recently participated in a study of tropical medicine as it is seen in Central America. Of all the diseases encountered there, malaria is the most prevalent and the most important. Since it is called in Spanish "Paludismo," the swamp disease, it may be likened to a swamp through which nearly every inhabitant of those countries is destined to make his way at least once and often many times. Some, as children, are sucked down to their death soon after entering the swamp, while others push on only to become the weakened, helpless prey of other diseases; in every case the effort required by the victim to extricate himself saps his energy from any gainful occupation and engenders individual and national poverty. Malaria thus presents a real problem and challenge to every doctor in the tropics. Furthermore, although it is only occasionally encountered in Washington, this disease will undoubtedly be more frequently seen here and in all of the northern United States when the members of our armed forces return from their present stations throughout the world.

I saw many varieties and manifestations of malaria, and as a practicing clinician who had been particularly interested in the chemotherapy of other infectious diseases, was bound to draw some parallels and to observe some contrasts. I would like to comment on certain of these observations as they pertain especially to treatment.

The 3 drugs which are in standard use are, of course, quinine, atabrine and plasmochin. The first fact that struck me forcibly was that there is no single, generally accepted method of treatment. For instance, Circular Letter 22, Office of the Surgeon General, War Department, January 16, 1943,[1] gives the following method of choice: (1) quinine sulphate, 0.6 Gm. (10 grains), 3 times daily for 2 to 3 days, or until pyrexia is controlled; (2) atabrine, 0.1 Gm. ($1\frac{1}{2}$ grains), 3 times a day for 5 days; (3) omit anti-malarial medication for 2 days, and then (4) plasmochin, 0.01 Gm. ($\frac{1}{6}$ grain), 3 times daily for 5 days. The further caution is added: "Never give atabrine and plasmochin concurrently."

Contrast this with the treatment schedule which is followed in the various United Fruit Company Hospitals, at one of which I stayed for 3 weeks. Here atabrine, 0.1 Gm. ($1\frac{1}{2}$ grains), and plasmochin, 0.01 Gm. ($\frac{1}{6}$ grain), are combined in a single tablet. The patient is given 1 of these tablets 3 times per day along with 0.3 Gm. (5 grains) of quinine sulphate for about 5 days. During the first day or two, if the patient is very sick, he may be given an additional 0.6 to 1.0 Gm. (10 to 15 grains) of quinine sulphate. At the end of 5 days atabrine and plasmochin are discontinued and quinine is given alone in doses of 0.25 Gm. (4 grains) 3 times per day.

Still a third régime is that recommended by Dove,[2] who states that his method has been used successfully for the past 14 years. Atabrine is given first for the febrile period and 4 days thereafter in doses of 0.1 Gm. ($1\frac{1}{2}$ grains) 3 times per day; then a course of quinine sulphate, 0.3 Gm.

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* Read as one of the series of "Saturday Morning Lectures in Tropical Medicine" before the student body of the George Washington University School of Medicine.

(5 grains) 4 times per day for 7 days; then atabrine in the same doses as before for 5 days; then quinine again, 0.3 Gm. (5 grains) 3 times daily for 5 days; then the same drug with the addition of plasmochin, 0.1 Gm. ($\frac{1}{6}$ grain) 3 times a day.

Is there any wonder that the practitioner who treats only an occasional patient with malaria is likely to be confused? If the different observers are obtaining good results, and there is no doubt that they are, the conclusion is inescapable that quinine and atabrine give comparable results when used in the treatment of malaria. Clark, Komp and Jobbins,[3] reporting on a 10-year study of malaria in Panama, make the definite statement: "We are of the opinion that quinine and atabrine are equally effective as anti-malarial drugs."

Plasmochin is supposed to help eradicate the carrier state after the active stage is over. That this result is questionable is attested to by the statement of the same authors: "We do not believe that the use of plasmochin simplex has played a very important part in our results. This drug cannot be given often enough or in large enough doses to accomplish its purpose." The toxic effects to which these authors refer are usually gastrointestinal, such as nausea and gastric pain, or nervous, such as headache, dizziness and drowsiness. They may be distressing and sometimes alarming. The Medical Department of Pan American Airways of Africa, Ltd., in a report[4] on its results in treating malaria states: "Plasmochin was not used, and our rate of relapse was apparently no greater than that encountered when this compound is employed." Other authorities believe that plasmochin does reduce the relapse rate and advocate its use after clinical recovery from malaria as a public health measure. This conflict in opinion merely emphasizes the fact that there is no one régime of drug therapy which will work in every patient with malaria.

If the patients apparently get well as quickly and in as great numbers regardless of the combination of drugs used, perhaps there is some other factor influencing recovery which is of equal importance to the drugs themselves. This brings us to the second observation which struck me rather forcibly, and that was the obvious evidence of immunity present in most of the patients with malaria.

The following cases illustrate what I mean:

C. V. G., a 28-year-old American, while working on the Pan-American Highway, had a severe chill on the morning of July 3. He was put on a boat and sent to the hospital and during the trip developed a severe headache and generalized aching. When he was admitted to the hospital later that night, the physical examination revealed nothing of note except a temperature of 101°F. and a pulse rate of 80. He was found to have Plasmodium falciparum in his blood, 1 parasite per oil immersion field. He was given 0.3 Gm. (5 grains) of quinine, 0.1 Gm. ($1\frac{1}{2}$ grains) of atabrine and 0.01 Gm. ($\frac{1}{6}$ grain) of plasmochin that night. On July 4, the day after admission, he continued to have severe headache and generalized aching and complained bitterly about low back pain and insomnia. These same symptoms continued through July 5. On July 6 he said that for the first time his head felt better, although his backache still continued and the general aching was diminished in intensity. His medication had been continued as follows: quinine, 0.3 Gm. (5 grains); atabrine, 0.1 Gm. ($1\frac{1}{2}$ grains); and plasmochin, 0.01 Gm. ($\frac{1}{6}$ grain), 6 such doses on July 4, 4 such doses on July 5, and 3 such doses on July 6 and on July 7. On the night of July 6 he managed to get a fair night's sleep for the first time on large doses of sedatives and he felt better on July 7, having only a moderately severe headache. This continued on July 8. On July 9, the seventh day of his illness, he was for the first time free of all symptoms except weakness and anorexia. The malarial parasites were found in diminished quantity in his blood on July 6 and none were found on July 7 or thereafter. He was discharged from the hospital on the tenth day of his illness, but he was still very weak and was unable to do any work for another 8 days.

The other case is that of J. R. C., aged 25, who was also an American working on the Pan-American Highway. He had a chill on July 19 and thereafter had fever and slight malaise. On July 20, when he was admitted to the hospital, nothing of note was found on physical examination except that his spleen was just palpable on deep inspiration. His temperature was 99.6° and his pulse rate 76. He was found to have Plasmodium vivax in the blood, about 1 parasite per oil immersion field. He was given quinine, 0.3 Gm. (5 grains); atabrine, 0.1 Gm. (1½ grains); and plasmochin, 0.01 Gm. (⅙ grain), 4 times on the day of admission, 6 times the following day, and 3 times each day for the 2 days thereafter. Parasites were found in diminished numbers 2 days after admission and were absent the following day, just as in the case of C. V. G. In marked contrast to the first patient, however, J. R. C. had no symptoms on the first day after admission except that he felt a little weak. He walked about the ward freely on the day after admission, and on the following day I found him on the sun porch playing poker with his fellow patients. He had no further complaints, continued to be up and around most of the time, and was discharged on July 24, the sixth day of his disease. Two days later he was back at work.

These 2 patients were alike in that they were both Americans working side by side in a malaria-infested country. They had identical numbers of malarial parasites in the blood stream, which disappeared at the same rates. Both were treated within 18 hours after the onset of the attack and received almost exactly the same treatment. Yet the first patient had fever which lasted 7 days after the onset, contrasted to fever of 3 days' duration in the second case. Furthermore, the symptoms of the active disease in the first patient continued 6 days, compared with 1 day in the second patient. These differences are explained when one hears the past histories of the 2 men. The first patient had never had malaria before, but the second had had 4 attacks in the preceding 4 months. His first 2 attacks had been severe, while the 2 later attacks, like the present one, had been quite mild.

The objection might be raised that the difference in the severity of the illnesses of these 2 patients was due to the fact that the first patient was infected with Plasmodium falciparum and the second one with Plasmodium vivax. Although it is true that the mortality rate from estivo-autumnal malaria is higher than that found in benign tertian malaria, nevertheless it is a well known fact among clinicians who are accustomed to treating both types of the disease that the average patient infected with P. vivax is just as sick as the average patient infected with P. falciparum and requires just as much treatment before the symptoms and fever subside. The higher death rate is mostly due to a small proportion of the patients who suffer from the "cerebral type" of the disease and also to the tendency of falciparum infections to precipitate blackwater fever.

In order, however, to show that malaria caused by P. falciparum may be very mild in a patient who had acquired immunity, I shall cite the case of another patient.

E. Y. was a 19-year-old Costa Rican who was brought to the hospital on July 3 by his fellow workers because he had "dropped out" while working in the fields. He had had a chill that morning and complained on admission of feeling cold, although his temperature was 104°F. and his pulse rate 110 per minute. Physical examination revealed nothing abnormal except that his skin was very hot and dry. His blood was found to contain 2 to 3 Plasmodium falciparum parasites per oil immersion field on the day of admission and again the next day. He was given quinine, 0.6 Gm. (10 grains); atabrine, 0.1 Gm. (1½ grains); and plasmochin, 0.01 Gm. (⅙ grain), on admission. Thereafter he received quinine, 0.3 Gm. (5 grains); atabrine, 0.1 Gm. (1½ grains), and plasmochin, 0.01 Gm. (⅙ grain), every 4 hours for 15 doses and 3 times per day for 2 more days. On the morning after admission he was found sitting in a group of fellow patients making surgical dressings. He had no complaints at all. From that time on he was up and about the ward most of the time. His temperature reached normal within 24 hours after he entered the hospital and remained there from that time until discharge on the fifth day of his illness.

The mildness of this case was undoubtedly due to previous attacks of malaria. The patient gave a history of 1 severe attack of the disease 4 years before and of several episodes which were probably attacks in the intervening years. The difference between these patients, then, may be explained on the basis of an acquired immunity, present in the second and third patients but absent in the first, because he had had no stimulus for development of immunity.

Boyd[5] believes that primary attacks of malaria always last longer than 14 days and usually longer than 25 days, unless previously terminated by drug therapy, whereas in patients who have been previously infected with the same strain of malarial organism, attacks subside spontaneously in a much shorter time or may be subclinical in intensity throughout. In these latter patients the concentration of parasites in the blood may reach as high levels as in patients with primary infections; but in untreated patients infected for the first time the parasite level stays up high for many days or weeks and then diminishes slightly. In partially immune patients, who are likewise untreated, the level of parasites begins to subside within a few days and drops rapidly until the plasmodia can no longer be found in blood smears.

This immunity can be proved to occur by other methods: by animal inoculations and even by complement-fixation and agglutination tests. The entire subject is excellently reviewed by Coggeshall[6] in *Medicine* for May, 1943. He concludes that, while immunity is usually due to the presence of the parasite in the body, it remains for a variable length of time after the parasite has died or has been eliminated by drugs.

There is considerable evidence, therefore, that the drugs which we customarily regard as specific for malaria, i.e., quinine and atabrine, do not destroy all the parasites and thus make the patient immediately well. Instead, these drugs apparently depress the mechanism of reproduction of the plasmodia, thus decreasing their numbers and drawing them from the blood stream, while complete recovery depends upon the effect of these drugs plus the immune forces of the patient himself. An understanding of these immune mechanisms can best be obtained by careful observation of the course of the disease in patients.

Another interesting observation which I made concerning malaria was that certain extraneous factors influence the course of the disease even as they do in other severe infectious diseases. Malaria is much more severe, for instance, at the extremes of life. The infant mortality in areas where the disease is indigenous is terrifically high. After childhood the patient has acquired immunity and may weather many attacks without at any time becoming dangerously ill. In old age, however, these patients experience the usual breakdown of physiologic mechanisms which make the course of any infection stormier, so that malaria contributes to a great many deaths in the older age groups in the tropics, even where it does not cause them alone.

The presence of other diseases makes the malarial infection worse. Amebiasis, or other intestinal parasitism, tuberculosis, syphilis, malnutrition, and avitaminoses are prevalent among the class of persons who are most frequently exposed to mosquitoes. These conditions make the disease more severe and account for many of the fatalities. Our "old friend" alcoholism is to be found wherever men experience thirst. Exacerbations of malaria can often be attributed to such overindulgence. Pregnant patients with malaria are usually sicker than nongravid women, while the malaria in turn often affects the pregnancy adversely. When any complications exist, the clinician is called upon to use his skill in combating them just as he would be if any other infection had supervened instead of malaria.

In conclusion, I might summarize these somewhat discursive remarks by emphasizing the following points: first, that although malaria is the most important disease of the tropics and the greatest cause of death of all diseases the world over, the actual principles underlying the treatment of the disease have not changed much from those used for the past hundred years; and second, that proper therapy demands more than the knowledge of the actions of 2 or 3 much publicized drugs, that it requires a knowledge of the natural course of the disease together with its modifications as a result of immunity, careful study of the patient himself, and the recognition of other factors which may influence the outcome.

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SURGICAL ASPECTS OF THE MANAGEMENT OF TETANUS

Report of a Case

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THE treatment of tetanus is a medical-surgical problem, the surgical aspects of which are sometimes neglected. The incidence of this disease has been dramatically reduced by the newer knowledge of prophylaxis and institution of measures calculated to prevent and modify this infection. In the American Army immunization is carried out by the administration of plain or fluid tetanus toxoid in a series of 3 subcutaneous injections of 1 c.c. each at intervals of 3 weeks with a booster injection at the end of the year. There have been no cases reported among battle casualties in the entire United States Army in the past two and a half years.[1] In the British Army no tetanus occurred in France or Flanders among battle casualties who had previously been inoculated with 2 doses of tetanus toxoid given 6 weeks apart.[2] However, on the home front, the menace of tetanus is still very real, since relatively few individuals have been immunized by tetanus toxoid.

Tetanus spores germinate in anaerobic necrotic tissues at the site of injury. Although phagocytosis occurs to some degree, propagation continues in an environment low in oxygen content. The local reaction is often unimpressive, and in children especially the site of implantation is insignificant to superficial examination. A soluble exotoxin is produced at this site which causes the muscular spasms characteristic of the disease. Abel and his associates[3] have adequately demonstrated that this toxin is absorbed into the circulation and is carried to the nervous system and to the rest of the body by this route alone. The toxin is fixed to the motor cells of the anterior cord and the motor cranial nerves and, as was demonstrated by Harvey,[4] peripherally to the motor end-plates of the muscle.

The prompt injection of adequate amounts of antitoxin intravenously neutralizes all the uncombined toxins in the circulation. The immunity thus produced is usually sufficient to control further creation of toxins at the site of inoculation. However, in some cases the rate of production of toxin is greater than the rate of antibody formation and despite apparently sufficient amounts of parenterally administered antitoxin, the clinical symptoms of the infection persist.

Surgical procedures in cases of tetanus are not emergency operations, but they should not be neglected when symptoms remain despite medical treatment. It is important to realize that the appearance of the wound alone, small or large, superficially healed or grossly infected, is not a dependable criterion in judging when interference is indicated. Excision, when employed, should be wide and deep; the wound should be packed loosely with gauze and allowed to heal by second intention. Pressure dressings have an analgesic effect. Needless to say, complete anesthesia must be used before any such procedure is undertaken.

REPORT OF CASE

R. E. (43-3035), a white male, aged 8 years, was admitted to Children's Hospital, Washington, D. C. on

September 27, 1943, with the chief complaint of inability to fully open his mouth. On September 19, 1943, while playing on a swing in his backyard, the patient received a stab wound in the posterior aspect of the left thigh, a long wooden splinter becoming embedded at that point. He was taken to the office of a physician who removed a piece of wood about 3 cm. long and painted the laceration with an antiseptic solution. The site of injury continued to be rather painful, and 3 days later he returned to his doctor, at which time the point of entrance was enlarged by incision and another strip of wood 3 cm. long was removed from beneath the dermis. The incision was closed with 2 metal clips, and he was given 1,500 units of tetanus antitoxin. On the fifth day after the injury the lad noticed that he could not fully open his mouth and suggested to his mother that he might be getting lockjaw. His mother, however, was not as well informed as her son on this subject, and it was 2 days later, 7 days after the wound was received, that he was admitted to the house service.

The family and past history was essentially negative. The patient had never received tetanus toxoid or tetanus antitoxin other than the dose mentioned.

Physical examination revealed a well developed and nourished youngster who did not appear to be acutely ill. A healing wound 1.5 cm. long was noticed on the left thigh. He was unable to open his jaws more than half way, but he did not complain of pain, and muscular spasm was not noted elsewhere. Nuchal rigidity was absent. The deep reflexes, however, were hyperactive. The rectal temperature was 99.2°F.; the pulse rate was 116 per minute; and the respiratory rate was 26. The white blood cell count was 6,000, with 47 per cent neutrophiles, 51 per cent lymphocytes, and 2 per cent eosinophiles. Urinalysis was normal except for a trace of albumin. Skin tests for serum sensitivity were negative, and 145,000 units of tetanus antitoxin was administered intramuscularly.

The following day a full-blown clinical picture of severe tetanus infection developed. Nearly all of the voluntary muscles became extremely spastic. Opisthotonos, a rigid, boardlike abdomen with full extension of the extremities, and risus sardonicus were persistent. There were superimposed tonic asphyxial convulsions due to contraction of the respiratory muscles giving rise to frequent paroxysms of alarmingly severe cyanosis. Apprehension was very marked and his temperature rose to 102°F.

Paraldehyde was given rectally with alcohol and saline repeatedly and for the remainder of that day reduced the severity of the attacks but hardly their frequency. He was kept in a dark room and exposed to a minimum amount of stimuli. Sodium luminal was used to supplement the sedative effect of paraldehyde when the rectal mucosa became so irritable as to eject much of this drug. After 3 days, the muscular spasms continuing, 1.5 c.c. of avertin in 60 c.c. of distilled water was given every 4 hours with salutary relaxation.

Fifty thousand additional units of tetanus antitoxin was injected about the site of the wound on the third day. The original wound did not appear to be particularly significant except for slight induration, but it was opened, a drain inserted and warm magnesium sulphate compresses continuously applied. Atropine sulphate ($\frac{1}{150}$ grain) was given when necessary for excessive salivation which additionally burdened his embarrassed respirations.

By the sixth hospital day the child's condition had improved somewhat, less sedation was required, and the spastic attacks became less frequent. He was able to take some nourishment in the form of a soft diet by mouth but was greatly weakened by the protracted seizures. Because of this, a low blood level of sulfadiazine was obtained by the administration of 7.7 grains (0.5 Gm.) 3 times a day with prophylaxis against a respiratory infection in mind. The temperature curve showed a daily elevation of 100°F. to 102.6°F., the rise usually occurring after a paroxysm of muscular contractions.

During the next week his condition generally continued to improve, but 2 weeks after reasonably adequate therapy had been employed, the patient still experienced 3 or 4 severe general spasms a day, during which he would become quite cyanotic and orthotonic, frequently with loss of control of his sphincters. The original wound had apparently completely healed.

After a surgical consultation with Dr. Herbert Schoenfeld was obtained on October 12, on the following day the child was anesthetized with nitrous oxide and the whole site of injury was excised widely and deeply to the fascial layer of the muscles. The area was packed loosely with gauze and allowed to fill in by granulation.

Following this operation, clinical improvement was remarkable and immediate. Muscular spasms ceased at once and sedation was no longer necessary. After a few days, the boy was allowed to sit in a chair, and in a short time was discharged. He was followed in the Outpatient Department for 4 weeks, and recovery was complete.

The excised tissue from the thigh was examined at the National Institute of Health Laboratories in Bethesda, Md. for Clostridium tetani spores. Dr. W. G. Workman, Acting Chief, Division of Biologics Control, gave the following report: "Cl. tetani associated with 2 other

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CLINICO-PATHOLOGIC CONFERENCE *

THE DEPARTMENT OF MEDICINE, GALLINGER MUNICIPAL HOSPITAL

TWO CASES OF CONSTRICTIVE PERICARDITIS

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February 2, 1944

DR. YATER: Dr. Loube, intern on Ward N, will present the first case.

DR. SAMUEL LOUBE: This patient, J. T., case no. B78079, a 69-year-old negro laborer, was admitted on November 16, 1943, complaining of weakness and shortness of breath of 3 weeks' duration, with a cough productive of a moderate amount of sputum. For several days he had been so weak that he could not get out of bed. There had been transient edema of the ankles. For 20 years he had had vague epigastric discomfort and for some time attacks of dizziness and headache. Several years before he had been told that he had hypertension. For 10 years he had not worked because of a fracture of the right knee which had disabled him. He had had gonorrhea as a young man, but denied syphilis.

Examination revealed a well developed, well nourished, elderly negro who was drowsy and somewhat dyspneic. The skin was dry and scaly with areas of exfoliation over the abdomen. The ocular fundi revealed only the early changes caused by hypertension. The area of cardiac dullness was increased both to the left and to the right, 9.5 cm. to the left and 6.5 cm. to the right of the midsternal line, and there was a loud to-and-fro friction rub synchronous with the heart sounds heard along both edges of the sternum. The heart sounds were heard with difficulty. They were somewhat irregular and about 160 per minute. There were no murmurs. The blood pressure was 110/80. A few transient râles were audible at the base of the right lung. Except for slight puffiness of both upper and lower extremities the remainder of the examination was unimportant. There has been a daily rise of temperature since admission. It was highest during the first 2 weeks, varying from 100°F. to 102°F. It gradually became less, and last week it was practically normal. However, in the last 2 days it has risen as high as 100.6°F.

Repeated urinalyses have been normal. Hemoglobin and erythrocyte count have been within normal range, and most of the time there has been a moderate leukopenia with a normal differential count. The Kahn test of the blood, blood urea, and blood proteins have been negative or normal. The sputum has not shown tubercle bacilli, and the main agglutination tests have been negative. A roentgenogram of the chest showed moderate enlargement of the heart, more marked toward the right, and evidence of a moderate degree of pulmonary congestion with elevation of the left hemidiaphragm. Roentgenographic and other examinations of the gastrointestinal tract and urinary system were negative. A tuberculin test with P.P.D. no. 1 was positive. An electrocardiogram on November 19 showed auricular flutter with 2 to 1 and

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* These conferences are held under the Chairmanship of the Head of the Department of Medicine, Dr. Wallace M. Yater, every Thursday from 2 to 4 p.m. Cases of particular interest, or those presenting diagnostic problems, are presented and discussed. These are résumés of two such cases.

3 to 1 auriculoventricular block, low voltage, and left axis deviation.

The patient was rapidly digitalized, and the flutter changed to auricular fibrillation and then to sinus rhythm, the electrocardiogram then showing mainly low voltage. Sulfathiazole was administered without appreciable effect on the fever or symptoms.

A moderate left pleural effusion developed and a liter of fluid was aspirated, which examination showed to be a nonspecific exudate.

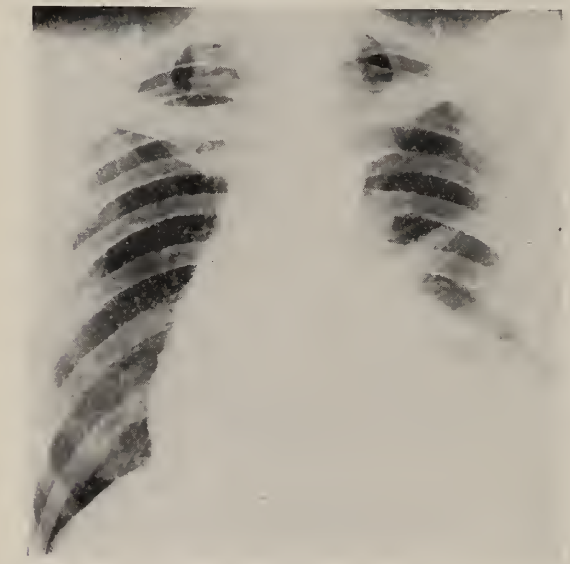

Fig. 1.

The area of cardiac dullness has become larger (fig. 1), especially toward the right, and pericardial effusion is suspected, but the venous pressure yesterday was 110 mm. of saline with no rise on pressure of the right upper quadrant of the abdomen. The arm-to-tongue circulation time was 40 seconds. Although the patient is now afebrile he is not better; in fact, 3 days ago while sitting up in bed he fainted and fell out of bed.

Dr. Yater: Dr. Hirsh is the medical resident in this case. I will ask him to discuss it.

Dr. Harold L. Hirsh: We thought the patient might have pericarditis with effusion, but the normal venous pressure seems to have ruled that out. It was felt the man was too sick to justify paracentesis of the pericardium.

Dr. Yater: There is something interesting about this man's pulse. Dr. Hussey, will you check this.

Dr. Hugh H. Hussey: There is pulsus paradoxus.

Dr. Yater: Yes. The heart shifts well to the right when the patient lies on his right side, but very little to the left when he lies on his left side. Percussion indicates that the area of dullness at the base of the heart is greater when the patient is lying on his back than it is when he is sitting. These findings, together with the paradoxical pulse, indicate pericarditis with some effusion and fixation of the heart on the left side. The roentgenogram shows the heart to be displaced to the right and evidence of pleuritis on the left. This appears to be a case of polyserositis with pericardial, pleural, and mediastinal involvement. It is the early stage of Pick's syndrome. The inflammatory phase is still active. If the patient lives he should develop the full-blown picture of chronic constrictive pericarditis.

Dr. Hirsh: But how are we to explain the normal venous pressure?

Dr. Yater: That is difficult. It should be elevated. But here again is an instance showing that too much emphasis should not be placed on an isolated test.

Dr. Sol Katz: Pleuritis and pericarditis suggest the possibility of tuberculosis. The extreme weakness might be due to adrenal involvement.

Dr. Yater: Yes. Tuberculosis may be the basis of the trouble. I don't know that we have to postulate adrenal involvement, however. In the way of treatment all that can be done is to provide bed rest and give symptomatic and supportive therapy.

February 8, 1944.

Dr. Yater: Tell us about the man we thought might be developing constrictive pericarditis, Dr. Hirsh.

Dr. Hirsh: The patient died 2 days ago. He went to the bathroom on arising that morning and on his return became orthopneic and cyanotic and died in a few minutes. Here is his heart. It appears to be greatly enlarged, but the large size is due to the fact that the pericardium is thickened, its thickness varying from 1.5 cm. to 4 cm., being greater near the apex. The heart itself is estimated to weigh about 250 grams, but with the pericardium it weighs 1,100 grams. Its cavities are not dilated, the valves appear normal, and the coronary arteries and aorta are only slightly sclerotic. Except for a pocket between the pericardium and the epicardium containing about 60 c.c. of blood-tinged fluid the pericardial sac is obliterated. Microscopic sections of the pericardium show fibrosis and tuberculosis. The pericardium was densely adherent to the mediastinum and the lungs, especially the left. The hilar lymph nodes were the seat of an old tuberculous infection, but elsewhere there was no gross evidence of tuberculosis except for a calcified subpleural nodule in the upper lobe of the right lung. There was an obturating embolus in the right pulmonary artery, but its origin was not discovered. The liver was moderately enlarged, weighing 1,650 grams, and was congested. The spleen was small. The lungs were congested.

March 2, 1944.

DR. YATER: Dr. Loube will present the next case.

DR. LOUBE: This colored man, J. B., a 53-year-old laborer, was first admitted to this hospital, December 11, 1931, and for 13 years has been treated for congestive heart failure and cirrhosis of the liver. This is his fifteenth admission (February 21, 1944) to this institution. His continuing complaints have been intermittent swelling of the abdomen and dyspnea on exertion. He has had other symptoms from time to time, such as palpitation of the heart, weakness, cough, pain in the chest, swelling of the ankles and "difficulty breathing at night." He has not had any serious illness other than the present, but he was a heavy drinker until he became ill. He was in the habit of imbibing a quart of whisky daily. The physical signs have remained the same all these years: enlargement of the heart with the apical impulse diffuse and about 15 cm. to the left of the midsternal line in the sixth intercostal space, weak heart sounds, auricular fibrillation, fleeting dry and moist râles at the bases of the lungs, enlargement of the liver about 4 fingerbreadths below the costal margin, and ascites. Laboratory examinations have been consistent throughout. Roentgenograms of the chest have shown rather marked enlargement of the heart, with evidence of slight pulmonary congestion (fig. 2); blood counts have shown moderate anemia and leukopenia; the urine has contained a trace of albumin; electrocardiograms have revealed auricular fibrillation with a slow ventricular rate of 50 to 70, moderately low voltage, and inverted T waves in leads I, II and IV F. The hippuric acid test has given a return of 2.25 grams of benzoic acid, and bromsulfalein tests have shown slight to no retention of the dye. Thorotrast hepatosplenograms have demonstrated enlargement of the liver but no evidence of hepatic disease or splenomegaly. Serum proteins have been normal or slightly diminished and the A/G ratio has usually been normal. The blood pressure has varied a great

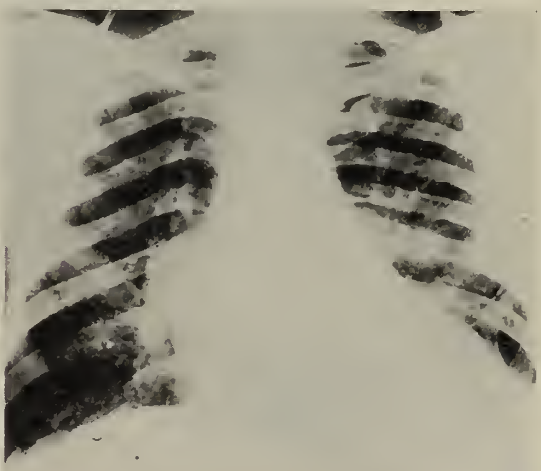

FIG. 2.

deal; the highest reading was 180/105, but on the last few admissions the pressure has usually been 132–105/90–65, and the ocular fundi show little evidence of hypertension. Venous pressures have always been high, the highest reading being 380 mm. H_2O, with a rise of about 30 mm. on pressure of the right upper quadrant. The venous pressure is not so high in the lower extremities. Circulation times have been increased to as much as 30 to 60 seconds. Renal function tests have given normal results. The patient has been fully digitalized almost continuously for 13 years. He has had numerous abdominal paracenteses of large amounts of transudate, and many injections of mercupurin.

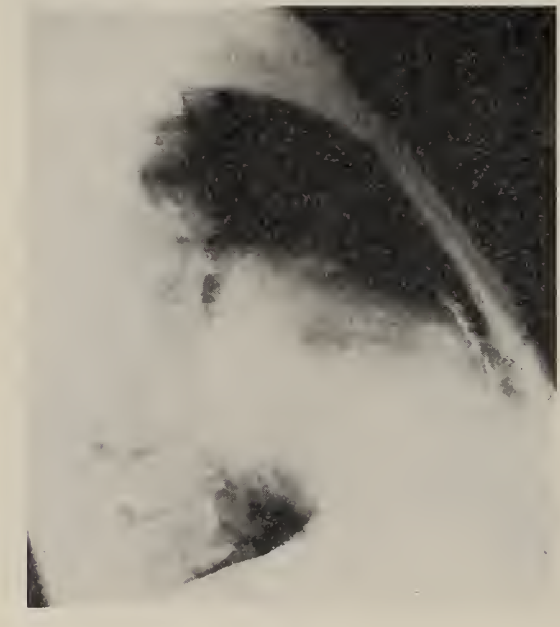

Fig. 3.

Dr. Yater: Dr. Hirsh is the resident in the case and will open the discussion.

Dr. Hirsh: Our problem here is to establish an etiologic basis for the heart failure and to decide whether the patient really has cirrhosis of the liver, possibly of cardiac origin. It would appear that all of the usual causes of chronic congestive failure can be eliminated except perhaps rheumatic, but, even there, fluoroscopic examination without and with barium in the esophagus shows no enlargement of the left auricle. There are fair excursions of the ventricular pulsations and a large heart, facts that seem to exclude constrictive pericarditis, but I believe it is still a possibility.

Dr. Yater: I would like to see a lateral roentgenogram of the chest. There is a suspicious area near the left border and all of the films have been postero-anterior exposures.

Dr. Hirsh: One was made this morning, but is still wet and hasn't been read. However, I can have it brought in.

Dr. Yater: Ah! This film makes your diagnosis for you (fig. 3). That is one of the best examples of a rim of calcium imprisoning the heart that I have ever seen. It is a perfect demonstration of the fact that oblique and lateral roentgenograms of the heart are often necessary to show the presence of calcium in the pericardium. In this case postero-anterior roentgenograms of the chest have been made repeatedly over a period of 13 years without calcification being suspected. Even oblique and lateral fluoroscopic examinations failed to reveal it. Here we have a case of chronic constrictive pericarditis that for 13 years has been considered one of congestive heart failure, when as a matter of fact there has been no heart failure. Make note of the fact that we have a very high venous pressure, such as often accompanies heart failure, but with very little pulmonary congestion or dependent edema throughout all these years. In reviewing a series of cases of calcification of the pericardium, all of which were instances of cardiac compression, I pointed out that the presence of calcium in the pericardium practically always implies cardiac compression, even though the features of that syndrome might not be fully developed. A high venous pressure is often the only confirmatory evidence, ascites often being absent, although the liver is usually enlarged to some extent. The calcification is probably most often the result of a healed tuberculous pericarditis, but in some cases denotes a previous pneumococcal or staphylococcal pericarditis.

Dr. Hirsh: But I thought chronic constrictive peridarditis was associated with a "small, quiet heart"?

Dr. Yater: Often it is, but the pericardium may be so thickened, as in this case, that the heart appears to be large. Although you observed that the pulsations seemed to be good, I imagine that you will change your mind on reexamination. You will no doubt find that the pulsations are not as strong as you thought. They can't be normal. Why, do you think, the venous pressures are higher in the arms than in the femoral veins?

Dr. Hussey: Because there is more constriction of the superior vena cava than the inferior, as is often the case.

Dr. Hirsh: Is there any cardiac pathology here?

Dr. Yater: No. Chronic cardiac compression is a disease of the pericardium and mediastinum. Partial atrophy of disuse of the myocardial fibers, however, usually develops. Auricular fibrillation is not uncommon, and occasionally a diastolic murmur somewhat suggesting mitral stenosis, la vibrance péricardique protodiastolique of Lian, is heard that is not due to organic mitral stenosis.

Dr. Katz: Would you agree that this patient has cardiac cirrhosis?

Dr. Yater: No. This is merely a congested liver. There is not conclusive evidence of cirrhosis of any kind, even "alcoholic," although this patient was an alcoholic. As to cardiac cirrhosis, although long-standing chronic passive congestion may lead to a little increase in central lobular fibrous tissue, I believe there is rarely if ever enough real cirrhosis to cause hepatic insufficiency or lead to the clinical manifestations of cirrhosis. I may be wrong, but I don't believe I have ever seen such a case.

Dr. Joseph Roberts: Wouldn't operation help this patient?

Dr. Yater: I do not believe an operation would be feasible. It would be almost impossible for a surgeon to resect this thick, bony pericardium.

Dr. Hirsh: Does this man need digitalis?

Dr. Yater: No. He does not have heart failure. Thirteen years of digitalis has been wasted.

Dr. Hirsh: But there is auricular fibrillation.

Dr. Yater: Yes, but the heart rate is even now much too slow. Only if the ventricular rate should become too rapid when the digitalis is discontinued will it be indicated.

Promin, Diasone, Promizole and certain related compounds appear to possess in varying degree the ability to restrain development of experimentally induced tuberculosis in guinea pigs It is recognized that this offers many contrasts with clinical tuberculosis in humans, even though the causative organism is the same.

Clinical and roentgenologic data so far made available are as yet inadequate both quantitatively and qualitatively to permit, even tentatively, a positive evaluation of the curative effects of such drugs upon tuberculosis in human beings. Until controlled studies of adequate scope have been reported it is recommended that none of these drugs be used for treating tuberculous patients except under conditions which will add to our knowledge of their clinical action, and in the presence of adequate facilities to protect patients effectively from their potentially serious toxic effects. Patients and physicians must be reminded of the Federal regulations which prohibit distribution of a drug in the experimental phase of development to other than research institutions to which the material is assigned by the manufacturer for either laboratory or clinical investigation.

Any use of chemotherapeutic agents in the treatment of tuberculous patients must, therefore, be regarded as a purely clinical investigation. It must be emphasized that such use is not without hazard and that the roentgenologic and clinical evidence reviewed gives no justification at this time for more than a critical interest in the value of these drugs in patients. Report of Committee on Therapy, American Trudeau Society, Am. Rev. Tuberc., April 1944.

President's Page

FINALE

It hardly seems possible that a year has passed since I assumed the office as President. Upon reflection I realize that many things have happened during this period and that I have enjoyed an experience which is given to few physicians.

Like my predecessors I have learned many things about which I had previously known very little. I wish it were possible for all of our doctors to have a similar experience. Very few are aware of the complexity of the problems with which the Society is confronted, the many routine matters which must be attended to, and the various viewpoints which must be considered by boards and committees before coming to a decision.

It requires a lot of effort to make an organization such as ours function. Hours of work are devoted to preparing communications and reports. For example, a letter to the membership is not just dashed off and dropped in a post-office box. It is written and rewritten perhaps many times, then submitted to a board or committee for approval. If approved, approximately 1,100 copies are mimeographed, placed in envelopes and mailed. The recipient has little knowledge of the hours put into even a simple letter which he receives. Where lengthy reports are concerned this work is multiplied many times.

Much labor also goes into preparations for meetings, especially one as ambitious as the Annual Scientific Assembly. Before the latter actually takes place, innumerable meetings and informal conferences are held devoted to plans; formidable correspondence is carried on with speakers, exhibitors and other participants; and thousands of words are written about the Assembly for the preliminary and official programs, the Medical Annals and bulletins.

Yes, I wish that all of you could have an inside look for this is just part of the story. I am confident that if it were possible for you to do so, we would have a stronger and more effective organization.

I appreciate the many courtesies shown me and the splendid coöperation I have received during my tenure of office. Thanks to all of you.

Fred R. Sanderson

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Editorials

CONSTRUCTIVE MEDICINE *

With the broadening viewpoint of what constitutes health, there is an equivalent broadening of the objectives of medical practice. The alleviation of disease might be likened unto the reconstruction of health. When we realize that health is always relative, one can immediately appreciate the possibility for improvement in the apparently well, but actually only partially healthy, individual. For this type of medicine we have suggested the term "constructive medicine." The objective of constructive medicine is to bring the level of individual health as close to the optimum as possible.

Obviously, prerequisite to improvement to any state of relative health is an analysis of the present status. The keystone of the bridge to greater vigor and effectiveness is the periodic health inventory, and its bridgeheads are thoroughness and individualization. The choice of the term "inventory" is intentional because so many have abused and limited the meaning of the phrase "periodic examination." Health inventory includes as essential elements study of the past history of the individual (it must be remembered that we are today because of what we went through yesterday), a clinical physical examination, certain laboratory and X-ray studies, and investigations into certain functional reserves. Not until all these data are available can a usefully accurate appraisal be made of the state of health or the approximate physiologic age. No business man expects an inventory or annual audit of the state of his business to be accomplished in a few minutes. Nevertheless, it is all too frequent that senescent individuals laboring under great stress and tension will ask the doctor, "Listen to my heart, Doc, and tell me how I am today." This cannot be done.

Reserve capacities to carry increased loads are very difficult to measure unless one creates conditions of stress. We cannot judge the reserve capacity of an automobile motor by listening to it idling at the curb. Driving the car up a steep hill will reveal the reserve power. That is why there are proving grounds. The situation with respect to the biologic capacities of man is quite parallel. Ordinary examination of the heart does not reveal its capacity to take on a burden of violent effort.

The principle of periodic physical examinations has fallen into disrepute in many quarters, not because of any weakness of the principle but because of poor application. One type of poor application is inadequacy of the examination, such as mentioned just above. A second and frequent fault has arisen through failure to apply the information elicited. All too often the findings are merely recorded on a card and filed away. There is only one purpose of diagnostic studies, and that is to supply the data upon which to base wise advice. The value of periodic health inventories depends almost wholly upon the soundness and practicability of the advice offered. Individualization of diagnostic procedures and of guidance is essential, particularly in dealing with senescent individuals. Mass measures of detection are inapplicable.

Specifically, periodic health inventories should include consideration of the following possible aids to greater health and enhanced work efficiency:

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* Excerpts from an address on "Senescence and Industrial Efficiency" presented at the Eighth Annual Meeting of the Industrial Hygiene Foundation of America, Pittsburgh, Penna., November 10–11, 1943.

(1) analysis of capacities can reveal the limits of exertion and/or mental strain beyond which it is unwise to go; (2) discovery of correctible defects in their incipiency makes possible correction before irreparable damage results; (3) early discovery of chronic and progressive disorders, such as diabetes, hypertension or arthritis, makes possible the institution of medical management to retard the progression of the disease; and (4) it is an opportunity for education in personal hygiene, particularly in such matters as diet, fluid intake, play, adequacy of rest and emotional conflicts.

Constructive medicine as applied through such periodic consultations is not a panacea which can prevent all ills, nor is it without certain definite and serious limitations. One cannot prevent all disease, any more than safety programs prevent all accidents. Even though a man may be in excellent physical condition he may still acquire serious and acute illness, such as pneumonia or influenza, or he may meet with a serious accident. But if the individual is in the full bloom of really good health prior to the acute infection or accident, his chances of recovery and his speed of recovery are greatly enhanced. One of the fundamental principles of geriatric medicine, which is concerned with the care of the aging, is that in older individuals the outlook in an acute illness is predicated more upon the condition of the patient prior to the acute disorder than upon what treatment is applied. This is just opposite to the situation which applies to illness in youth. The pediatrician has every right to assume that the child was quite healthy prior to an acute illness. The margin of safety gets less and less as we age.

EDWARD J. STIEGLITZ, M.D.,

RATS AND HUMAN INFECTIONS

Recent high interest in Washington's rat problem makes it desirable to consider the role that this rodent plays in the transmission of certain diseases.

The rat is known to be the common reservoir of some infections and is potentially important in others. In the past few years about one-half dozen cases of endemic typhus fever or murine typhus have been traced to close association with rats in the Washington Terminal area. This disease which is usually a symptomless infection in rats is transmitted from rat to rat and from rat to man by the flea, *Xenopsylla cheopis*. Infection in man is probably introduced by scratching or rubbing the feces of the flea into the skin, but not directly by the bite. The disease occurs most commonly in the summer and fall, and among those having close association with rats.

Weil's disease or leptospiral jaundice has been found to occur in this area as reported by Manchester, Larson and Thomas in the April, 1944 issue of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA. This disease is caused by a spirochete, *Leptospira icterohaemorrhagiae*. Human infections may result from ingestion of food or water contaminated with the urine of infected rats, in which case the mouth or gastrointestinal tract is the portal of entry. Cases have been reported elsewhere where the infection apparently entered through the skin, in workers on fish wharves and in slaughterhouses, in those who work in sewers and wet mines, and others in close association with rats or their excreta. A closely related infection caused by *L. canicola* apparently has its reservoir in dogs. Rat-bite fever is a relapsing type of disease following the bite of rats infected with a spirillum, *Spirillum minus*. Following the bite the infection frequently produces inflammatory signs in the lymph nodes draining the affected area. The onset of symptoms appears 5 to 10 days following the bite, with fever and sometimes chills. Following a period of about a week, during which the temperature is elevated to 100°F. to 104°F., the fever disappears for a few days only to reappear. Successive periods of fever are less severe and usually appear in increasing longer intervals. This infection responds promptly to a few injections of arsphenamine.

Food poisoning or infection particularly by the Salmonella group of organisms has been charged to rats. Food contamination by rat feces has been described in a number of reports of outbreaks in other communities.

Other infections in which the rat plays an important part but at this time are only potentially dangerous in this area are trichinosis and bubonic plague. In trichinosis the rat is partly responsible for perpetuating the disease among swine. Rats exist in this area in sufficient numbers to constitute a real menace should bubonic plague be introduced here.

The role which the rat plays in the transmission of diseases to man is sufficient reason for establishing stricter rat control measures. In addition to this it is a useless, detestable and destructive animal.

George C. Ruhland, M.D.

CONSERVATION OF VISION

I do not wish to discuss here the industrial aspect of this subject, which does not so much concern us in Washington or its vicinity. I would rather place the emphasis upon prevention of poor vision due to poor physical development and improper hygiene of life in the young.

When Von Bismarck created that which later became Germany, he crowded the children of the Germanic states into the schools at an early age. The schools were overcrowded, illy ventilated and poorly lighted. School hours were long from the time the little child entered the school in the first grade to the day he left off schooling as a high school or university graduate. Small children were driven hard in their work and had of course the German script to read. The net result was to make of the Germans a near-sighted nation which they remain today.

It is quite true that we do not know the specific cause of myopia; the etiology is a mooted question. We all agree, however, that overuse of the eyes, poor lighting, overheated rooms, too long hours in the school room, and insufficient out-of-door exercise predispose to myopia those who have a tendency to it. Heredity plays a strong part. The most potent cause, however, lies in the factors just stated. Should not the experience of the past be of some help to us in the future and more particularly now?

Should we not contemplate some of those older civilizations who have learned from experience the proper and better modes of life? Can we not contemplate the schools of Switzerland to advantage? There physical exercise by the scholars and also the teachers is part of the curriculum and receives the same rigid attention as the scholastic requirements. The results are evident in the vigorous boys and girls one sees in that beautiful country. They are physically hard and very robust. According to my own observations, which were confined to several summers and talks with the ophthalmologists in that country, myopia is unusual. They give it little thought since there are such few cases. Only a statistical study could give us accurate knowledge of this situation but no data are available.

There is no question in my mind but that the great handicap myopia is preventable and in many cases curable in youth if children are kept out of doors and exercise vigorously. I believe the medical profession does not always fully realize the handicap placed upon children because of the necessity of wearing glasses. They should never be given to children unless it is absolutely necessary. Bates and Huxley and their sight-without-glasses propaganda came into being because many people are wearing glasses which they do not really need! All that these men do is to get the glasses off people who do not really need them!

There is a need for us to realize that vigor and health are more essential to the safety of the individual, the family, the community and the Nation than nonessential education.

Reduce the nonessentials in our curricula (and there are so many of them) and put that time saved in out-of-door exercise for the youth of the land from the time they enter the first grade until they leave the university or college. Our educational system now from the standpoint of the physical well-being of our youth is a sort of madness. We have had so many boys and girls from all walks of life, in public and private schools, tell us they have no time for out-of-door exercise even though they might desire it. This is tragic, heart-breaking and unnecessary.

Under the accelerated program in the schools the condition is worse and, we regret to say, in the medical schools worst of all. What kind of youth are we preparing to fight the savage and merciless nations in the west and in the east? How many of our youth will have defective eyes because they have such very poor physical development? To those who have seen the people of these nations and observed how vigorous they are, it can but cause apprehension.

Only today (Sunday, May 21) there was printed a speech made by Admiral Gatch, U.S.N., an officer of ability, with much battle experience in the South Pacific. He warned that the next time we were caught unprepared we would probably be destroyed horribly and swiftly. We would do well indeed to listen to that sound advice by beginning now to rear a race of strong men and strong women with good eyesight. If we are to survive, a great Army and a great Navy made up of strong men are absolutely essential. We must build these strong men from childhood; it can be done in no other way. Mens sana in corpore sano.

WILLIAM THORNWALL DAVIS, M.D.

In and Out of Focus

BY THE OBSERVER

"... Antidote to Misguided Leadership..."

One of the most outspoken medical publications in the country is the *Westchester Medical Bulletin* published by the Medical Society of the County of Westchester (New York). It never dodges a controversial issue nor does it hesitate to take a stand. Whether one agrees with the views expressed or not, they are ably and honestly presented and therefore command respect. The *Bulletin*, by the way, is a modest publication as to size but attractively gotten up and unusually well edited.

In its May number the *Bulletin* waxes eloquent on the subject of the Association of American Physicians and Surgeons, a new organization with headquarters at Gary, Indiana. The *Bulletin* says about the Association:

> "The *piece de resistance* (advisedly so called in this case) on the menu offered by the new A.A.P.S. is to be found in Article I, Section 2, of the By-Laws of this organization, wherein any applicant for membership agrees 'that where 75 per cent of the eligible physicians in civilian practice in the county where he practices have become members of the Association, he will not carry on professional relations nor coöperate with any non-member therein; that he will not carry on such relations nor coöperate with a non-member physician in any other county where 75 per cent of the eligible physicians in civilian practice have become members; that he will not carry on professional relations nor coöperate with any physician where such relations are deemed by the Association to be inimical to the interests of its

members and those of the public; that he will not carry on professional relations nor coöperate with any hospital or other institution where such relations are deemed by the Association to be inimical to the interests of its members and those of the public.'

"Article XIII, of the same By-Laws lists the following activities which are to be considered 'not in the public interest and inimical to the interests of this Association and of its members for them to engage in or associate in consultation or other coöperation with others engaged in:

1. Participation in any plan, scheme, or system whereby

(a) An individual physician is responsible jointly, severally, or collectively for the provision of general medical benefit in any area, territory, or district;

(b) Remuneration for services, or a schedule of fees, is arbitrarily fixed by any public authority, officer, or agency;

(c) Any fee scale or schedule may be fixed on a nation-wide basis without regard to local conditions or needs;

(d) The number of potential patients of any practitioner may be fixed by any public authority, officer, or agency;

(e) Any complaint or charge against a participating physician concerning professional acts or omissions may be heard and determined by any lay individual or by a board, panel, or committee, a majority of whom are not physicians and surgeons; provided, that nothing herein shall be construed to abridge the right of a hospital to adopt and enforce rules for the management of the institution and its medical and surgical staff, nor to deny the courts in any jurisdiction the right and power to function according to law;

(f) The patient is ordinarily denied the right to consult one physician and obtain his services without the advice or consent of another;

(g) Any person is compelled to enter into a scheme or plan of health insurance or benefits;

2. Serving upon the staff of any hospital whose standards are or may be fixed by any public authority, officer, or agency, to the exclusion of, or without the voice of the management of such hospital and the members of its medical and surgical staff.' "

The *Bulletin* summarizes its views as follows:

"Volumes might be written on the advantages, disadvantages, and the underlying causes for the rise of such organizations as this, but we will confine ourselves to the single paramount question of whether organized medicine should, or can afford to, adopt the philosophy and methods of a trade union.

"We believe such a transformation would be fatal. It is absurdly naïve to imagine, in the first place, that the majority of physicians would stand together in any effort to block a proposal strongly favored by the public merely because the physicians felt that their economic status might be adversely affected by such a proposal.

"Successful physicians,—those enjoying outstanding reputations among the public and commanding the respect of the profession for their achievements in medicine,—would never subscribe to union tactics in the first place and would defy them if threatened with their application by the rest of the profession.

"On the other hand, the unsuccessful physicians,—the misfits in the profession, those who have never been able to make a go of practice under normal competitive conditions,—could never be counted upon to support the strong-arm coercive methods recommended by a medical union to maintain economic standards of practice. They are the physicians who will always make their services available to groups and programs which promise them a degree of security, however meagre the compensation or humiliating the terms.

"Even if medical unionism could be made to work as such,— which it couldn't,—how much real coercive power would a union of 150,000 physicians have—especially when one considers that a large proportion of its members will be rendered ineffective in time of crisis by previous contracts, or over-riding commitments which would take precedence over any pledges made to the union?

"If medicine is ready to cease being a profession, it may rightly consider becoming a union. If it wishes to remain a profession and to retain the status, privileges and esteem that accrues to a profession in the public eye, then the sooner we stop all this nonsense about unionizing the medical profession, the better.

"The only antidote to misguided leadership is a strong well-balanced aggressive leadership on the part of our legitimate spokesmen, namely, the House of Delegates of the American Medical Association. Those estimable gentlemen will have some real problems to work on at the forthcoming meeting of the House of Delegates in June. Let us hope that they will be equal to their responsibility and to the challenge of the times."

★

The Medicine Show Is Ever With Us

Physicians are frequently reminded of the code of ethics to which most of them have subscribed. Newspapers and sometimes radio commentators hold up their hands in horror at the thought of doctors indulging in ordinary commercial practices or failing to adhere to the ancient tradition that the welfare of the patient comes first. This is proper. None are more insistent that high standards of conduct be maintained than the doctors themselves. But there is another side to this picture.

How about the conduct of newspapers and the broadcasting companies as regards the physical well-being of their readers and listeners? Are they as concerned about the health of the people as we have a right to expect them to be? What about their ethics?

No one can quarrel with the idealism of editorial pages or the splendid programs which can be heard daily on the radio. One wonders then how these great dispensers of news and views reconcile their otherwise high standards with some of their "medical" and "health" advertising. For example, one finds patent medicine ads in reputable newspapers which are not only misleading but sometimes vicious. If the newspapers are delinquent in this respect the radio is much more so with its ballyhoo for various nostrums. In fact the radio deserves the most severe criticism in this regard. The *Journal of the American Medical Association* for May 13, 1944 has this to say on the subject:

> "Although many leading publications of the country have made a serious effort to eliminate the worst of the 'patent medicines' from their advertising pages, numerous radio stations remain notoriously backward in this respect. Hour after hour, day after day, loud speakers of radios blare forth outrageous claims for some nostrum or 'patented' home remedy. The 'patent' remedies advertised range from those that may be positively harmful . . . to those that are merely grossly overpriced in relation to their value. Even these, however, tend to delay the use of dependable foods or services and initiate the expenditure of funds that might better be applied to securing scientific diagnosis and treatment. Recently newspapers as widely different as the Chicago *Tribune* and *PM* have almost simultaneously exposed some of the most notorious of the 'patent medicines.' But newspapers alone cannot solve this problem. The situation requires the housecleaning efforts of the radio industry itself and the more active interest of those governmental agencies. such as the Federal Trade Commission, Food and Drug Administration and Post Office Department, which are delegated with responsibility in this regard. . . . "

In the same issue of the *Journal* there appears a report by Dr. Roy R. Kracke and Dr. William R. Platt of Emory University, Georgia, who report the cases of two men suffering from chronic bromide intoxication arising from self administration of headache powders which are so frequently advertised on the radio. "Both men," these physicians report, "had been seen stumbling aimlessly around the streets of their home town and had been thought to be drunk." One of the men was hospitalized for nineteen days and the other twelve.

Drs. Kracke and Platt go on to say that "There seems to be an increase in . . . drug intoxication caused, according to the Federal Trade Commission, by increased consumption of various agents designed to soothe the nerves of a population at war living in a scarcity of doctors."

Newspapers and radio stations should obtain reliable information about drugs which they advertise before they become party to their promotion. It isn't enough, for example, for a radio announcer to say, "If your symptoms continue you should see a doctor." The listener is often incapable of judging when the point has been reached when he should see a physician. In the meantime the drug he is using may have done its damage. Where the drug is harmless but of little therapeutic value, there can be no justification for bilking the public.

★

Recent Course a Great Success No one could have been more surprised by the overwhelming response to the POSTGRADUATE COURSE IN PSYCHOSOMATIC MEDICINE than members of the Committee on Postgraduate Education. The long line of physicians, medical officers, nurses and guests waiting to enroll on the opening night was entirely unexpected. It looked for all the world like a queue at a motion picture theater.

Members of the Committee were not the only ones surprised at the interest shown. Speakers too remarked about the large attendance. When this was written all of the lectures had been given. At each session the auditorium in the Medical Society's building, which seats 500, had been filled to near capacity.

This unusual turnout speaks most eloquently for the selection of subject matter and of the speakers who participated. Understandably the Committee is much elated over the success of this course.

★

Hospitalization Insurance–1754 Not so long ago your Observer discussed at length various phases of medical care with a physician who was well informed on the subject. Among other things "plans" for providing health services were mentioned. The doctor said, "Of course, you know there is really nothing new about hospitalization insurance. If you will read the *Bulletin of the New York Academy of Medicine* for February, 1944 you will learn that in the eighteenth century a far-sighted Frenchman proposed a plan which at that time was thought too visionary to be taken seriously." Your Observer obtained a copy of the *Bulletin*, read the "story" and thereupon decided that readers of his column would find it both interesting and enlightening.

A description of the plan is preceded by a brief biographical sketch of Piarron de Chamousset, who conceived the insurance scheme. Chamousset, the son of a distinguished and wealthy family, was born in 1717. He dedicated his life to reforms and public welfare and worked passionately and zealously for their consummation. His experience with a hospitalization insurance plan has a familiar ring even in these times. One must remember, however, that the conditions existing in hospitals of that period were pretty terrible and the proposal of an insurance scheme "must have seemed pure fantasy at the time of its publication."

It is not possible to publish in full the description of the scheme, which was entitled a "Plan of a Hospital Association in Which by Means of a Very Modest Sum Each Member Will Be Assured in Case of Sickness of Any Kind of Assistance Which He May Desire." However, selected paragraphs should be sufficient to give to those who are interested in this subject an adequate idea of Chamousset's proposals.

The objectives of the plan were described as follows:

> "It is then of interest to all citizens to form an establishment which furnishes all the necessary aid to the sick, and which guards against all the inconveniences of which we are about to speak. For this it is necessary (1) that the rich be received in a manner which leaves nothing to be desired, even to their niceties; (2) that the treatment in sickness be absolutely the same both for them and for those less fortunate; (3) that the expense be suited to the means of those in the hardest circumstances; (4) finally that propriety hinders no one from profiting from the aid offered them. Such is the principal object of this establishment which we propose to the public, and it will be executed by a free association which will continue only as each member finds it to his advantage, and by which one may acquire by paying each month a most modest sum the right to procure all the aid one might need in case of illness either at home or in a hospital, of which one becomes co-proprietor by joining this association."

As to the service which would be offered, the following gives the reader a good idea:

> "A complete pharmacy will be established there, provided with excellent drugs and managed by most intelligent men. Physicians and surgeons in chief will be assembled, selected with all possible care, who will be attracted equally by the honor of filling such positions and by the salaries attached to them. Other physicians and surgeons of sufficient number and living also at the hospital will work assiduously under the eyes of their chiefs, healing the sick, some prescribing, others dressing the wounds of those who have undergone operations. A fixed number of young physicians will be received, lodged and fed, for a modest fee, who doubtless will be eager to train there and who will at the same time be of great help at the bedside of the sick, reporting to the physicians the effects of their prescriptions and an infinity of enlightening observations to render the treatment more certain.
>
> "Two of the most celebrated physicians of Paris will come regularly every day to consult with those who live in the establishment and decide together the puzzling cases which demand mature deliberation. If it happens

that a patient has confidence in a physician or surgeon who is not connected with the hospital, he will be free to associate himself at his expense with the other physicians and surgeons of the hospital.

"In order to prevent mistakes and to keep the condition of the patients always under the eyes of the physician as well as the symptoms which he has noticed, all prescriptions will be written, also the regimen, and placed at the patients' bedsides. Furthermore, it will be a new means of study and observation for young physicians, not counting the fact that this way of writing prescriptions will make the physicians more attentive in composing them.

"Surgery will be cultivated with no less care, and there will be added to the number of surgeons, aides and boys admitted and boarded in the hospital, other pupils paying also a very modest sum for their food and lodging. These will be trained under the eyes of the masters and will be inspired by the hope and desire of winning in the competition, the only way by which any of the positions in the hospital may be obtained. Add to that vigilant care and surveillance, a scrupulous choice of the proper foods, and every attention to cleanliness to prevent disgust and to avoid unpleasant atmosphere. Such are the principal precautions to be taken for the treatment of patients and the care of diseases in general."

In connection with the administration of the plan Chamousset said,

"The Hospital will be governed by an administrative body, sufficiently large, elected every three years, but no one can be elected except members."

"None will have the right to the assistance of this hospital except those who have been admitted to membership, and in order to allow for different conditions and means, there will be established five classes of members who will pay more or less, not for treatment of their diseases (for all classes will receive the same care), but for optional accommodations which vary according to conditions and which are necessary only to those who habitually enjoy them.

"Each member of the first class will occupy a complete apartment and will be furnished and served in a manner suitable to his way of life. Those of the second class will each have a separate room; those of the third will be in rooms containing two or three beds; the fourth will be assigned to halls with a dozen beds; and the fifth in halls with thirty beds in which the patients will never be side by side, as each of the beds will be enclosed by a partition which will form a little room."

"Here is the table of the different prices which members will pay according to their age and class. You will notice that only those between fifteen and sixty may join. But the membership fee never changes for those who are punctual about continuing their membership; it remains just what it was when they started, and their membership has no other termination than that of their life. Heads of families should receive an advantage over others, that of paying the price fixed for the class between 15 and 35 years for each member of the family rather than paying per person according to age.

"[The abbreviations in the following table refer to *sol*, half penny, and *livre*, franc.]

Members will pay by month—	*Rooms with 30 beds*	*Rooms with 12 beds*	*Rooms with 3 beds*	*Rooms with 1 bed*	*Apartments*
From 15 to 35 years of age..........	25s.	30s.	40s.	3 l.	5 l.
From 35 to 40 years of age..........	26	32	43	3 4s.	5 8s.
From 40 to 45 years of age..........	27	34	46	3 8	5 16
From 45 to 50 years of age..........	28	36	49	3 12	6 4
From 50 to 55 years of age..........	29	38	52	3 16	6 12
From 55 to 60 years of age..........	30	40	55	4	7

These are just a few of the provisions in the plan described by Chamousset. Their resemblance to those incorporated in modern-day plans is striking, which simply goes to prove that "there is nothing new under the sun."

Our Boys Come Home

You can count on it that things will be different when "Johnny comes marching home." This time there will be many more "Johnnies" than there were in World War I and their adjustment to civilian life is not going to be easy.

Although it appears that doctors will not return as promptly at the war's close as those in other branches of the service, there will be several hundred more physicians in the District of Columbia than there are now who must be absorbed in civilian practice. Their war experience will have done a great deal to them and we at home must be prepared for their changed outlook. We must not only render such assistance as we can but try to understand them.

Some will want to take up where they left off; others will prefer to engage in some other type of practice. They will have new ideas about many things including the functions of the Medical Society. A static organization will not be satisfactory. Personally, your Observer looks forward to that day with pleasant anticipation for it will bring to our organization, as it will to others throughout the land, an objectiveness and vigor which it needs.

A majority of the men who are practicing in the District now are past middle life. When our "boys" come home, many of these physicians will be glad to relinquish their organizational responsibilities. It would be very helpful if we could ascertain as nearly as possible the changing viewpoints of our physicians with the armed forces because that will make the transition a great deal easier for all concerned when they come home. Efforts have already been made along this line. Most of our readers are familiar with the correspondence carried on by the Secretary with medical officers from Washington. Many of the letters which have been received are quite revealing. Your Observer suggests that an analysis be made of these communications to determine the consensus regarding our Medical Society and what is expected of it.

★

Read Your Policies

The other day your Observer heard a group of doctors discussing the respective merits of their accident and health policies. It was obvious from what was being said that they had only the vaguest knowledge of what they would receive in the event of sickness or injury. In fact, it is doubtful if they had even looked at their policies. Our guess is that they were merely repeating what insurance representatives had told them.

Physicians are not the only ones negligent in this regard. Most people—yes, business men included— buy insurance policies and never read them. Few know what they have bought until accident, death, or loss of property occurs. Then they discover that either they have purchased what they thought they had or that the benefits fall far short of expectations.

It is with no thought of casting doubt on the integrity of insurance companies that your Observer warns doctors that such companies are not in business for their health. They must make money and they do. As everyone knows, they are carefully supervised by the state in which they operate. At intervals the soundness of their financial condition is ascertained. Those who do not meet the requirements in the respective states are not permitted to continue in business. It is evident then that insurance companies have nothing to give away and that the lower their rates the fewer the benefits. In other words the purchaser gets only what he pays for.

The suggestion is made to doctors that if they have not read their policies before that they do so now. It will require a little time, of course, but not as much as they think. They are especially cautioned to read the fine print for here there may be a few surprises in store for them.

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War and Our Children

A distinctive feature of the *Virginia Medical Monthly* is the monthly Guest Editorial. Written by distinguished physicians and laymen these editorials are a worthwhile contribution to an excellent journal.

In the May issue Dr. Beverly R. Tucker of Richmond, Virginia, is the "guest." He writes an editorial under the title "Little Nazi-Made Zombies." Like many other physicians he is deeply concerned about the youth in countries ravaged by war. Dr. Tucker calls attention to a study made in 1943 by Dr. Marie Helen Mercier and Dr. J. Louise Despert. These physicians observed that when food became scarce in Nazi-occupied Europe there was an increase in delinquency, especially among adolescents. Stealing of necessities led to taking things of no value. Nutritional deficiency was common and children "lacked gaiety and enthusiasm and they never smiled."

Dr. Tucker comments on this situation as follows:

> "The question of the effect of a global war upon its generation of children is, of course, important, but the question of its effect upon children of the Nazi-occupied countries is of paramount importance. These, with the children of unoccupied countries, shall have the burden and responsibility of reorganizing the world that is to be, and at the same time, they shall have the greatest opportunity ever given a generation. What are we doing and what shall we do to see that they shall not be found wanting? The answer is not easy or specific. No one mind, the mind of no one nation and of no one race, can truly comprehend, much less solve the problem. It is not a matter merely of vitamin feeding plus some inelastic rules plus preconceived charts and graphs, or plus anything else. The planning must be international and interracial, and to be everlasting, must be everchanging.
>
> "Let the statesman and the mechanic, the business executive and the laborer, the economist and the educator, the lawyer and the prelate do what can be done with their special abilities, and still there looms large the need for those who through love of children, and those who because of a knowledge of eugenics, obstetrics, paediatrics, psychology, psychiatry, child-guidance, and social service, to help the oncoming and ever oncoming generation.
>
> "We shall need an interglobal wise, unselfish organization of those who can speak a common language and have a common purpose which will receive the common support of the peoples of the earth. Such an organization is no more impossible than was the birth and fruition of the Red Cross."

It is easy to weep for this generation of children but that is of no help. We must do something for them; that requires thought, energy and sacrifice.

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CALENDAR OF MEETINGS

May 1	Board of Censors
	First Session, Postgraduate Course on Psychosomatic Medicine
May 3	Annual Business Meeting of Society
May 8	Second Session, Postgraduate Course on Psychosomatic Medicine
	Subcommittee on Program, Annual Scientific Assembly
	Subcommittee on Exhibits, A.S.A.
May 9	Committee on Arrangements, A.S.A.
May 10	Subcommittee on Prepaid Medicine
May 12	Subcommittee on Civilian Practice
May 15	Third Session, Postgraduate Course on Psychosomatic Medicine
May 17	Scientific Meeting of Society
	Procurement and Assignment Committee
May 22	Fourth Session, Postgraduate Course on Psychosomatic Medicine
May 24	Subcommittee on Prepaid Medicine
May 25	Section on Pediatrics
May 27	Subcommittee on Tuberculosis
May 29	Executive Board
	Section on Pathology and Laboratory Medicine

Dues of Physicians in the Services

Inquiries from physicians with the armed forces lead to the belief that some are not familiar with the actions taken by the Medical Society in regard to their membership dues. In fact, not a few have sent their checks along as usual. Of course, these were returned with a note of explanation.

For the information of those who may not be informed in regard to this matter your Observer submits the following: Dues of physicians with the armed forces who are Active or Associate Members of the Society were with few exceptions remitted or cancelled for the duration of the war beginning January 1, 1944. The exceptions are physicians who have applied for membership since being inducted into the armed forces, or "career physicians" in the regular Army, Navy or Public Health Service who were in these services prior to the war. The former must pay $10.00 the first year, none thereafter for the duration; the latter, all of whom are Associate Members, must continue to pay regular dues.

Physicians who were commissioned before April 1 this year, the date on which dues become delinquent, were not required to pay dues for the current year. However, those who were commissioned after April 1 must pay their dues for the entire year.

War Section

LETTERS FROM PHYSICIANS IN THE SERVICES

Letters from Washington physicians with the armed forces have been omitted in the last two issues of the Medical Annals. The editors fully intended to publish them regularly but most of the communications received since the March number could not be used.

The following are some of the more recent letters received by the Secretary:

From Lt. Colonel Rober A. Bier, c/o Postmaster, New York City:
Dear Ted:

. . .As you can see I have been moved. Am now attached to the British Army. Looks like I am lend-lease. . . .

I am very glad to have this opportunity to serve with the British. There is much I admire in them. They are very practical, and do things in a very business-like way. Contrary to popular opinion they are quite friendly and hospitable and most of the officers are really "regular guys." And the enlisted men know how to soldier. When they salute you, you know you have been saluted, and how!

Among other things I have been learning how to drive a British truck (lorry) and will have motorcycle driving soon. They lend us motorcycles to ride over the country to finish our training. . . .

From Lt. J. Leonard Conley, c/o Fleet Post Office, San Francisco, Cal.:
Dear Ted:

I want to thank you and the Society for the "service" we who are away are receiving. I think it's great. Everything you send along arrives, even tho in the case of the ballot it was late, but as we are on a ship that continues to move from place to place the mail at times is hard pressed to catch up with us. I hear of different men who are in this part of the world and have tried to find them but that's a big job and I have only succeeded once in meeting Dr. Gillen, but I will still keep my eyes and ears open and may have better luck in the future. About two weeks ago found out where Walter Atkinson was located but missed by a couple hundred miles of getting there. . . .

From Lt. Colonel Walter Stokes, Camp Luna, Las Vegas, N. M.:
Dear Ted:

. . .As you may recall, I am not in the Medical Service but am a Line Officer in the Air Corps. I am Director of the Weapons School here and Deputy Chief of Staff, in charge of Operational Training. I take pride in having just about the best Weapons School in the Army and am training weapons instructors for all the Air Transport Command. Since entering the Service I have had a couple of promotions, recently being made Lt. Colonel. . . .

P. S. Please convey my best wishes to Wallace Yater. He will be interested to know of the work I am doing.

From Comdr. Herman S. Hoffman, c/o Fleet Post Office, San Francisco, Cal.:
My dear Ted:

During the past several months, I have received two or three of your very interesting letters, some issues of the monthly bulletin and numerous notices of important meetings. The latter have always arrived from four to six weeks after the meeting has been held—much to my chagrin and dismay. You can, no doubt, understand my feeling in this connection, since you know how anxious I am to get to meetings of the Society. Even when I was at home I very frequently attended meetings—particularly those at which buffet supper was served. . . .

As for myself, sad to relate (I am sure it will come as a cruel blow of disillusionment) although I am in a forward area, things are pretty quiet. Bombs are not falling, bullets are not flying around my ears, the sun is shining, the weather is fine, it's very pleasant here, am getting three squares daily, a cold bottle of beer on occasion, sleep on an inner-spring mattress and speaking of a good mattress—ho, hum, I think I'll snatch a little shut-eye. It's a tough war. . . .

From Major George Tolstoi, c/o Postmaster, New York City:
Dear Ted:

My colleagues write home—"Having interesting time. Wish you were here." Well, England is a grand country and her people brave, generous and reserved. You would find much of interest here but my separation from the practice of medicine for almost four years makes me realize that we all appreciate your efforts to preserve our right to practice medicine when we return in accordance with the highest medical traditions. Keep it up.

We have a general hospital set-up with a congenial, competent staff. Major Fierst is our anesthetist. Other members of the unit come from almost the entire Union. At present we are preparing for the eventualities. It is interesting to conjecture on the expected date of termination of the European phase. My own Gallup Poll conducted among our men and the British too leaves me confused. At any rate, in general I am more conservative than they.

Incidentally please keep your chatty bulletins coming this way. News is scarce and it's a real pleasure to hear from home.

(*Continued on page 250*)

Active Physicians within the District of Columbia Metropolitan Area

May 1, 1944

SPECIALTIES	DISTRICT OF COLUMBIA																		DIS-TRICT TOTALS	VIRGINIA						MARYLAND						METRO-POLITAN TOTALS
	White—Male						Colored—Male						Female Colored and White																			
	1914* or later	1913 1906	1905 1899	1898 1879	1878 or earlier	Total	1914 or later	1913 1906	1905 1899	1898 1879	1878 or earlier	Total	1914 or later	1913 1906	1905 1899	1898 1879	1878 or earlier	Total		1914 or later	1913 1906	1905 1899	1898 1879	1878 or earlier	Total	1914 or later	1913 1906	1905 1899	1898 1879	1878 or earlier	Total	
Anesthesia	1	2	4	8	1	16													16			1			1							17
Hospital-full-time														1				1	1													1
Dermatology, Syphilology		2	4	5	5	16			1	3		4		1				1	21													21
General	2	50	46	92	23	213	1	8	16	49	11	85	3	9	7	7	4	30	328		13	9	15	7	44	3	17	16	26	8	70	442
Hospital-full-time	1	1	5			7				1		1							8		1				1		1	1	4	1	7	16
Gynecology, Obstetrics		15	21	22	4	62		3	1	5	1	10		2	1	1		4	76		1				1		2			1	2	79
Hospital-full-time		2	1			3				1		1							4								2	1			3	7
Health Dept., full-time	1	2	1	6	2	12	1		1	1		3		1	4	3		8	23			1	1		2		1		1		2	27
Industry-full-time		1	1	3		5													5													5
Internal Medicine	1	28	26	40	9	104		4	1	4		9		1				1	114		1				1			1			1	116
Hospital-full-time		5	1	4		10				1		1							11													11
Ophthalmology		4	10	9	5	28				1		1			1			1	30			1			1							31
Otolaryngology		2	6	24	1	33				3		3		1		1		2	38													38
O A L R		3	2	7	2	14													14										1		1	15
Hospital-full-time		1				1													1													1
Orthopedics		3	6	5	1	15			1	2		3							18													18
Pathology	2	1	1	8		12									1			1	13													13
Hospital-full-time			1	2		3				1		1							4													4
Pediatrics		13	5	17	2	37		1	1			2	2	1	4			7	46		4				4							50
Hospital-full-time			2			2													2													2

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* Year of birth.

Physical Therapy			1	1		2				1		1							3													3
Proctology			3	1		4													4													4
Psychiatry		2	4	10	1	17			1	2		3			3	5		8	28											1	1	29
Hospital-full-time	1	1	2	7	1	12								2		5		7	19								2		3	1	6	25
Radiology		3	1	8		12													12										1		1	13
Hospital-full-time		1		3	1	5			1			1							6													6
Surgery	2	11	19	29	5	66		1	1	1	1	4							70			2			2		1				1	73
Hospital-full-time		1				1		2	2			4							5									1	1		2	7
Teaching and Admin. full-time	1	1		9	3	14	1	3	3	6		13							27													27
Urology			2	14	2	18		1	2	2		5							23		1				1							24
Hospital-full-time			1			1													1													1
Totals	12	154	176	335	68	745	3	23	32	84	13	155	5	19	21	22	4	71	971		20	15	16		58	3	25	20	37	12	97	1,126
Totals—Hospital-full-time	2	12	13	16	2	45		2	3	4		9		3		5		8	62		1				1		5	3	8	2	18	81
Totals—Health Dept., Industry, Teaching, Administration	2	4	2	18	5	31	2	3	4	7		16		1	4	3		8	55			1	1		2		1		1		2	59
Total—Exclusive of full-time-Hospital Service, Health Dept., Industry, Teaching and Administration	8	138	161	301	61	669	1	18	25	73	13	130	5	15	17	14	4	55	854		19	14	15	7	55	3	19	17	28	10	77	986

* Year of birth.

PRACTICING PHYSICIANS IN THE WASHINGTON METROPOLITAN AREA

A Study

Above there appears a chart showing a number of physicians employed full-time and engaged in private practice in the Washington Metropolitan Area on May 1, 1944. This is the most complete analysis which has been made to date.

An examination of the chart discloses that very few physicians under thirty years of age remain in Washington and that there is a growing number of physicians in the advanced age group. More than 50 per cent of the white male physicians in private practice are over 45, a large percentage of them being in the fifties and sixties.

A very small number of recent graduates from medical schools are now entering private practice. In fact, the armed forces require all internes and residents who can qualify physically. There are therefore no physicians to replace those who become disabled except those who are rejected by the armed forces.

In arriving at the ratio of physicians, population figures provided by the Bureau of Census were used. Although these were compiled on November 30, 1943, they are said to be as nearly correct as are obtainable. According to the Bureau there were 1,175,384 persons in the Metropolitan Area. There were 986 physicians engaged in private practice on May 1, 1944, 669 white, 55 female, 130 colored, 55 physicians in nearby Virginia and 77 in Maryland. The latter are situated within the Metropolitan Area. On the basis of these figures, there is one physician to 1,192 persons. Dr. Paul F. Dickens, State Chairman of the District Procurement and Assignment Service for Physicians, has therefore taken the position that no more physicians can be made available to the armed forces at the present time.

In a statement to the press on May 21, 1944, Dr. Dickens said: "I wish to point out also that the Washington physicians are responsible to a large extent for the medical care given individuals within the Metropolitan Area in nearby Maryland and Virginia. Our figures show the ratio of physicians to population in Prince Georges and Montgomery Counties, Maryland, is one physician to 2,880 persons; in Virginia it is one physician to 2,484 persons. As the minimum number of physicians required in metropolitan areas is approximately one physician to 1,200 persons, it can be seen that these communities must of necessity depend in no small degree on the physicians in the District.

"Despite these facts," Dr. Dickens said, "there is no need for concern. In my opinion there are at present a sufficient number of physicians in the Metropolitan Area to care for the civilian population. No more physicians will be made available to the armed forces without careful study, unless the demands of the military become so imperative that additional practitioners must be released. Other arrangements will then be made to provide the necessary care for civilians. Luxury medical care has no place in wartime Washington. However, necessary care can and will be provided."

ANNUAL BUSINESS MEETING

There was a fairly good attendance at the Annual Business Meeting of the Medical Society of the District of Columbia, which was held on May 3. As usual, reports were presented and business of importance transacted. Considerable interest was shown in the election of officers. Following the business session Robert Montgomery, Ph.D., Economic Adviser to the Executive Director of the Foreign Economic Administration, addressed the meeting on the subject, "Technological Impact on Our Social World."

Prior to the meeting copies of the Reports of Officers and Boards and a Review of Committee Activities for 1943–1944 had been mailed to the Society's membership, giving them an opportunity to familiarize themselves with this material before it was acted upon.

Annual Report of the Chairman of the Executive Board

Included among the above reports was one by the Chairman of the Executive Board. Embodied in his report was a résumé of the activities of the Board. Mention was specifically made of the death of the Society's legal counsel, Mr. Charles S. Baker, in August, 1943. Tribute was paid to him for his devoted service to the Society.

In concluding his report the Chairman said:

"In previous years this report has closed with a reference to impending changes in medical practice. They are more imminent now than they have been and members are cautioned that they must be prepared to meet vital issues intelligently. Unfortunately, the threat of disunity hangs over the medical profession. This is dangerous, for in disunity lies defeat. Only an informed and united medical profession can be strong. Current problems are dealt with in the Medical Annals and the *Journal of the American Medical Association* as well as by the press. You can be certain that your officers and members of committees, particularly those dealing directly with the medical care problem, are keeping abreast of the times. They will submit their views and recommendations to the Society from time to time. However, this will be of small consequence if the rank and file of the profession is disinterested or uninformed. A heavy responsibility rests on all medical practitioners in these times."

REPORT OF THE SECRETARY

In his report, the Secretary reviewed his activities during the year and commented upon the general state of the Society's affairs.

He submitted a report on the Society's membership, presenting the following figures:

	1940	1941	1942	1943	1944
Active	839	843	855	881	915*
Life	59	60	60	64	63
Associate	190	208	211	212	204*
Honorary	7	7	7	9	9
Total	1,095	1,118	1,133	1,166	1,191

* Up to May 1, 205 Active and 48 Associate Members had entered the military services.

During the year the Secretary participated in 186 meetings and conferences. He attended numerous functions of which there is no record.

Although previously very active in civic affairs, the Secretary had accepted additional community responsibilities during the year. On April 12, 1943, he was elected a member of the Board of Directors of the Council of Social Agencies of the District of Columbia and Vicinity for a three-year term. Meetings of this Board are held monthly. The Secretary was also appointed a member of the Health Planning Committee of the Council and developed a questionnaire which was used in a study to ascertain the interest of employees of the agencies of the Council in prepayment medical service plans.

He was made a member of the Emergency Ambulance Committee and of the Traffic Advisory Council of the District of Columbia. Both appointments were made by the District Commissioners.

An increasing amount of his time was devoted to matters pertaining to the war. The District Procurement and Assignment Service for Physicians, of which he is Secretary, has been very active. Several surveys were made for the purpose of determining the number of physicians in private practice in the District of Columbia. These studies served as a guide in making physicians available to the armed forces.

The Secretary also accepted an appointment to the District of Columbia Committee on Nursing in January, 1943. Functions of this Committee are similar to those of the District Procurement and Assignment Committee for Physicians.

News letters to members of the Society in the armed forces were continued. As physicians at home who read the MEDICAL ANNALS know, they have been favorably received. Quite a number of the replies have been published in the ANNALS and have been widely read.

The Committee on Postgraduate Education sponsored a POSTGRADUATE COURSE ON PSYCHOSOMATIC MEDICINE during the month of May. The Secretary actively assisted the Committee.

As in previous years, the Secretary lectured to the Senior Students of the Georgetown University School of Medicine on "Physicians' Records." He also addressed the joint meeting of the Honor Society of the Howard University College of Medicine and the Medico-Chirurgical Society, Inc., on "The Physician in Modern Society."

The Secretary represents the physician-subscribers to Group Hospitalization, Inc., as Group Treasurer. Most of the work in this connection is done by the office staff. It is interesting to note that on March 1, 1943, there were 378 physician-subscribers and that a year later, on March 1, 1944, there were 394.

One of the most active committees of the year was the Committee on Medical Care. This Committee has undertaken an extensive investigation to determine the unmet health needs in the District of Columbia. At the present time the Committee is considering the sponsorship of (a) another prepayment medical service plan, and (b) diagnostic clinics. Much of the "spade work" is being done for the Committee by the Chairman and the Secretary. Recently both visited Detroit, Michigan, for the purpose of observing the Michigan Medical Service in operation. The Secretary also devoted a few days to the study of the Hospital Saving Association at Chapel Hill, North Carolina. The Secretary continues to be very much occupied with this phase of the Society's program.

One of the most successful projects of the Society during the year was ARMY-NAVY NIGHT which was undertaken at the suggestion of Captain Darrell C. Crain, M.C., A.U.S., who is now on military duty in Australia. The Secretary devoted considerable time to preparations for the NIGHT, and he states it was one of the most pleasant tasks assigned him. Much credit for the success of this undertaking goes to the Committee on Arrangements for the NIGHT and the Woman's Auxiliary.

The 15th ANNUAL SCIENTIFIC ASSEMBLY held at the Mayflower Hotel, September 30, October 1 and 2, 1943, was the most successful to date. Of 2,111 who registered for the ASSEMBLY, 1,036 were physicians. The Secretary coöperated closely with Dr. Arnold McNitt, Chairman of the Committee on Arrangements, and those assisting him. He was in charge of the Technical Exhibit, for which all space was sold several months in advance.

The MEDICAL BUREAU was under the direction of the Secretary. Its progress during the past year has been very satisfactory. Until a year ago there had been 226 subscribers, 68 to the Telephone Secretarial Service, including private wires to Doctors, Emergency, Garfield, Providence and Sibley Hospitals and to the Health Security Administration, and 152 to the Alternate Listing Service. The report shows that on May 1 the BUREAU had 275 subscribers, 114 to the Telephone Secretarial Service and 161 to the Alternate Listing Service.

As the Managing Editor of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, the Secretary handles all details of publication. He writes for the editorial section and departments devoted to non-scientific subjects. He is also in charge of the advertising. The ANNALS paid its way this year, which is all that is expected of it.

The Secretary expressed his appreciation to officers of the Society, members, and the office personnel.

ELECTION OF OFFICERS

The election procedure was somewhat changed from last year. Active Members in the armed forces were permitted to vote by mail. Others were required to vote in person at the Medical Society's building. This year the voting was lighter than in recent years, there being 259 votes cast. As a result of the balloting the following officers were elected for the year 1944–45:

President-elect: William Earl Clark
First Vice President: William M. Ballinger
Second Vice President: K. Elizabeth Parker
Member of the Executive Board: Fred R. Sanderson
Member of the Board of Censors: Jesse T. Mann

Lt. Colonel James M. Greear, Jr., who was elected President-elect last year, will take office as President of the Society on July 1, 1944. Colonel Greear is stationed at Valley Forge General Hospital, Phoenixville, Pennsylvania. Although he will not be able to attend all meetings of the Society, he will endeavor to be present at as many as possible. In his absence the First Vice President, Dr. Ballinger, will carry on.

REPORT OF THE BOARD OF CENSORS

The Board reported that in the last year 43 applicants for membership were interviewed and 49 were, upon its recommendation, elected.

The Board approved the proposal made by the Executive Board that Major General Norman T. Kirk, Surgeon General of the Army, and Major General David N. W. Grant, Air Surgeon, A.A.F., be elected to Honorary Membership. General Kirk was elected on March 1, and General Grant on May 3, 1944.

As previously reported, the Board of Censors like the Executive Board is responsible directly to the Society. Upon its decisions depends the quality of the membership of the Society for it alone can recommend applicants for election.

ANNUAL REPORT OF THE WOMAN'S AUXILIARY

The members of the Woman's Auxiliary to the Medical Society of the District of Columbia have worked diligently throughout the year 1943–44. They have worked mainly on projects pertaining to the war effort. In this article I will state briefly the various activities undertaken throughout the year.

During October we assisted the doctors at the Fifteenth Annual Scientific Assembly held at the Mayflower Hotel. At one of the booths, where articles were sold, the receipts were $250. This amount was turned over to the Medical and Surgical Relief Committee of America.

During the Fourth War Loan Drive, a booth was maintained in the Medical Society's building for selling bonds. More than $50,000 was turned over to the United States Treasury by those who manned this booth.

Early in the year Mrs. John Shugrue and her committee held a benefit luncheon and white elephant sale. It was most successful and helped to swell our treasury fund.

Our Red Cross Unit carried on its work throughout the year. We urge you to help with this project. Mrs. Charles McEnerney, our Chairman, will be glad to give you any information concerning the work of this unit.

The Auxiliary helped with the sale of tuberculosis seals during the month of December. Also during this month we gave donations to the Home for Crippled Children, the Washington Heart Association and the Community War Fund. During the latter part of the year we contributed to the Russian War Relief, and to the fund for our own Prisoners of War we gave a generous donation.

We gave some financial assistance to the doctors in painting the offices in their building. The kitchen we had painted and put into good condition.

On the evening of March 24, the members of the Auxiliary worked with members of the Medical Society in sponsoring a program and supper to honor the wives and mothers of our doctors in the services.

On May 10 we held our final meeting, at which time our officers were elected for the coming year. They are as follows: Mrs James Greear, *President*; Mrs. John Shugrue, *First Vice President*; Mrs. Gilbert Rude, *Second Vice President*; Mrs. Edgar Quayle, *Recording Secretary*; Mrs. George Reeves, *Corresponding Secretary*; Mrs. William Orr, *Treasurer*.

In conclusion I would like to thank the members of the Auxiliary for their splendid coöperation throughout the year and to urge all who can to come and work with us next year. We look forward to having many new members for the year 1944–45.

Mrs. Fred R. Sanderson
President

HOSPITALS PARTICIPATE IN WAR LOAN DRIVE

The Medical Division of the District of Columbia War Finance Committee is confident it can surpass its voluntarily assumed quota of $1,000,000 sales during the Fifth War Loan drive which opens June 12 and closes July 8.

Each of 12 hospitals in the District has a quota based on the number of beds in the institution. This was decided upon at a series of conferences held with officials of the Treasury Department as the fairest way to break down the overall Medical Division quota.

Bonds purchased by physicians and others in the medical profession may be credited toward the quota of any hospital designated by the purchaser.

As a means of stimulating sales and helping purchasers visualize how their War Bond investments swing into action, each hospital will sponsor some piece of equipment which its quota will purchase.

The national quota is $6,000,000,000, of which $107,000,000 has been allocated to the District of Columbia. Of this amount, the quota for sales to individuals has been fixed at $61,000,000.

Suitable citations will be awarded by the Treasury Department to hospitals distinguishing themselves in the campaign, and similar awards will also be made to individuals for outstanding services.

Hospitals will be provided with leaflets, descriptive literature, and posters for display during the campaign. In addition, the Speakers Bureau of the D. C. War Finance Committee will provide speakers and moving pictures for hospital War Bond rallies.

Quotas for each hospital and the equipment which they will finance follow:

Hospital	*Quota*	*Sponsored Equipment*
Casualty	$62,200	Evacuation Hospital—400 Beds
Children's	81,300	Aircraft Rescue Boat
Columbia	51,900	Pursuit Plane
Doctors	103,000	Evacuation Hospital—750 Beds
Emergency	133,600	Station Hospital—500 Beds —Overseas
Episcopal Eye, Ear & Throat	41,500	Convalescent Camp—1000 Beds
Garfield	151,475	Navy F.B.F.—Avenger Torpedo Bomber
George Washington University	37,800	Medical Equipment for Hospital Ship
Georgetown	95,450	Ambulance Plane
Homeopathic	25,000	Hospital Clearing Station
Providence	116,200	Hospital Service Plane
Sibley	105,200	Convalescent Hospital—3000 Beds

W. Calhoun Stirling, M.D.
Chairman, Medical Division, D.C.
War Finance Committee

On The Home Front

The Section on Pediatrics held a round table discussion on the Emergency Maternity and Infant Care Program, May 25, in the Society's library. Officers were elected as follows:

Dr. William Francis O'Donnell, *Chairman;* Dr. George Maksim, *Vice Chairman;* Dr. Dorothy S. Jaeger, *Secretary-Treasurer.*

The **George Washington University Medical Society** held its annual business meeting, May 20. **Dr. William M. Ballinger** gave the President's Address on "Functional Activities of the Gastrointestinal Tract." A motion picture entitled "A Visit to Old Mexico" was shown following the address.

New officers were elected for the coming year, as follows:

Dr. Fred A. J. Geier, *President-elect;* Dr. J. Burton Glenn, *First Vice President;* Dr. Irma Belk Hobart, *Second Vice President;* Dr. Oscar B. Hunter, *Secretary-Treasurer;* Dr. William M. Ballinger, *Counselor for five years.*

Dr. Robert H. Harmon took office as President of the Society, June 1.

Dr. A. K. Besley, Superintendent of the new **Prince George's General Hospital,** Cheverly, Md., advises that the following medical staff has been appointed:

DEPARTMENT OF MEDICINE: Dr. Leslie H. French, *Chief*
General Medicine: Dr. Leslie H. French, *Chief of Service;* Drs. J. I. Boyd, J. P. Clum, A. Deitz, A. Etienne, J. G. Kirchick, T. Latimer, W. E. Malin, H. B. McDonnell, W. B. Moyers, W. Norton, J. Sasscer, P. VanNatta, J. M. Warren
Pediatrics: Dr. Preston A. McLendon, *Chief of Service;* Drs. T. A. Christensen, L. W. Dufault, M. L. W. Evans, D. S. Jaeger
Neuropsychiatric: Dr. Roger S. Cohen, *Chief of Service;* Drs. J. Coggins, J. Maloney
Ophthalmologic: Dr. Oscar Lavine, *Chief of Serivce;* Dr. R. Cox
Syphilo-Dermatologic: Dr. R. McCeney, *Acting Chief of Service;* Dr. L. Hays
Laboratory:
  Clinico-pathologic—Dr. H. Connerty, *Chief of Service*
  Roentgenologic—Dr. Harold R. Reed, *Chief of Service*
Consultation:
  Neurology—Dr. A. Schneider
  Psychiatry—Dr. A. Evans
  Clinico-pathology—Dr. T. Cajigas
  Ophthalmology—Dr. B. Rones
  Public Health—Dr. J. Byers
  Tuberculosis—Dr. J. J. Feffer
DEPARTMENT OF OBSTETRICS AND GYNECOLOGY: Dr. Jacob Kotz, *Chief;* Drs. G. J. Ellis, M. S. Kaufman, J. F. Warren, W. Brainin, C. C. Hageage, G. J. Hageage, I. M. Lavine, L. W. Malin
DEPARTMENT OF SURGERY: Dr. Joseph P. Shearer, *Chief*
General Surgery: Dr. Joseph P. Shearer, *Chief of Service;* Drs. A. K. Bowie, G. H. McLain, S. Schwartzbach, N. B. Steward, L. M. Jimal, B. P. Warren
Genito-Urology: Dr. James M. Fadeley, *Chief of Service;* Dr. G. R. Gable
Neurosurgery: Dr. James W. Watts, *Chief of Serice*
Otorhinolaryngology: Dr. Harry F. Davies, *Chief of Service*
Orthopedics: Dr. Guy W. Leadbetter, *Chief of Service;* Dr. J. J. Radice
Anesthesia: Dr. Charles X. Suraci, *Chief of Service*

A District Community Blood Bank, to meet emergency civilian needs here at minimum cost, was ordered by the District Commissioners on May 10. The blood bank will be directed by a six-man governing board, appointed by the Commissioners. The Board members are Dr. Charles Stanley White, representing surgeons in the District; Dr. John A. Reed, representing internists; Dr. John W. Orem, of the Washington Hospital Superintendents' Association; Dr. Oscar B. Hunter, of the Medical Society of the District of Columbia; Dr Roger M. Choisser, representing pathologists; and Fred S. Walker of the Washington Central Labor Union, representing laymen.

Plasma will be distributed from the Office of Civilian Defense Blood Bank, which now has 2,000 units on hand. Plans are being drawn up to add to the present blood supply through public donation.

Dr. W. T. Wootton, President of the **Southern Medical Association,** died suddenly at St. Luke's Hospital, St. Louis, May 2. **Dr. James A. Ryan,** of Covington, Ky., Vice President of the Association, is now President and will continue in office until the St. Louis meeting in November.

The following physicians have been appointed members of **Health Security Administration** representing the Medical Society of the District of Columbia:

Dr. Earle G. Breeding, to succeed Dr. James A. Cahill, deceased
Dr. Thomas F. Collins, to succeed Dr. Theodore C. C. Fong, who is in service
Dr. Vincent B. Hungerford, to succeed Dr. Russell K. Hollingsworth, who has moved away from Washington
Dr. J. Winthrop Peabody, to succeed Dr. Howard F. Kane, who is in service.

Dr. Charles P. Cake was honored by fellow physicians and friends when he retired May 3 as Chief of the Tuberculosis Department of Gallinger Municipal Hospital after ten years' service. **Dr. Sol Katz,** his assistant, will continue the work of Dr. Cake until a successor has been appointed.

Theodore Wiprud has been appointed Professor of Medical Socio-Economics at Georgetown University School of Medicine, succeeding **Dr. Arthur C. Christie,** who has been on the faculty of Georgetown University for many years as Special Lecturer in Medical Economics in addition to being Professor of Clinical Radiology, which latter position he will retain.

At a joint meeting of the Section on Otolaryngology of the American College of Physicians and the Philadelphia Laryngological Society, March 15, **Dr. Norman P. Scala** read a paper on "Vertical Nystagmus Produced by Peripheral Labyrinthine Lesions."

Dr. Aaron H. Gerber discussed "Pharmacology of Endocrines in Obstetrics and Gynecology" at the quarterly meeting of Pi Chapter, Alpha Zeta Omega, international pharmaceutical fraternity, May 11.

Dr. Paul B. Dunbar was appointed Commissioner of Food and Drugs by Federal Security Administrator Paul V. McNutt, May 6, to fill the vacancy caused by the retirement of **Commissioner Walter G. Campbell.** Dr. Dunbar has held the position of Associate Commissioner of Food and Drugs since 1942.

Commissioner Campbell, who retired April 30, had been connected with Food and Drug Law enforcement operations since the Federal Government began to regulate interstate commerce in these essential commodities thirty-seven years ago. He entered the Federal service as Chief Inspector in 1907, when the Food and Drug Act of 1906 became effective. When the Food and Drug Administration was transferred from the Department of Agriculture to the Federal Security Agency in 1940, Mr. Campbell was designated as Commissioner of Food and Drugs.

Comdr. Maxwell E. Lapham, M.C., U.S.N.R., who relinquished his duties as Executive Officer of Procurement and Assignment Service several months ago because of illness, has been ordered to active duty at the Naval Hospital, San Diego, Calif. **Dr. Paul C. Barton,** Acting Executive Officer in Dr. Lapham's absence, has been appointed Executive Officer by the Directing Board. **Dr. Deane F. Brooke** was made Assistant Executive Officer, the position vacated by Dr. Barton.

According to an announcement in the press, **Dr Mario Scandiffio** has resigned his position as Medical Director of **Group Health Association** and **Dr. Russell F. Cahoon** has resigned as Assistant Medical Director. Both physicians will return to private practice and teaching but plan to remain on the medical staff on a part-time basis. Dr. Scandiffio's resignation will take effect not later than November 1, and Dr. Cahoon's not later than July 1.

The appointments of **Theodore Wiprud** as a member and of **Dr. George K. Nutting** as an alternate member of the District Commissioners' Traffic Advisers were confirmed on April 15, 1944.

Paul D. Sleeper was reëlected President of the **District Tuberculosis Association,** May 7. Other officers reëlected were Dr. Irving W. Winik, Vice President; Dr. Paul B. Cornely, Secretary; and Samuel Levine, Treasurer.

Mr. Sleeper has also been elected to the Board of Directors of the National Tuberculosis Association.

CORRESPONDENCE

WASHINGTON, D. C., May 17, 1944

MR. THEODORE WIPRUD, EXECUTIVE SECRETARY
MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA
WASHINGTON, D. C.

DEAR MR. WIPRUD:

In accordance with our conversation today, I am outlining two items wherein the physicians may be of service to the Office of Price Administration in their prescription of dietary requirements for their patients.

The first request is that the prescription be related solely to rationed items. Many requests are for meat. If the patient requires beef, it should be so stated, but if alternate non-rationed meats may be substituted for all or a part of the beef, then the request should be specified in calling for only the amount of rationed meat.

Secondly, the work-load of the Boards would be relieved immensely if the requests were couched in specific quantities, for instance:

1 pound of butter per week
2 pounds of beef per week
32 oz. canned fruit per week

Assuring you of our continued coöperation, I am

Very truly yours,
CHARLES K. DAVIES, JR.
DISTRICT RATIONING EXECUTIVE
OFFICE OF PRICE ADMINISTRATION

WASHINGTON, D. C., May 10, 1944

EDITOR
MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA
WASHINGTON, D. C.

DEAR SIR:

My attention was recently directed to the modus operandi of a great democratic privilege exercised by the members of the Medical Society in their annual election.

The privilege of the ballot was apparently not appreciated by 75 per cent of the members, because only about 25 per cent voted at the last election. The reasons for this evident apathy should be discovered and corrected lest they become symptoms of disunity, which, by all means, must be avoided.

I have some thoughts on the subject, which I desire to place before the Society for its serious consideration, and I hope that the Executive Committee may find an opportunity to alter some of the practices of the past with respect to the season known as election time. The current method in election season is to name the candidates two months before election, which allows time for the crystallization of prejudices regarding race, religion, school, etc., and this is encouraged by the politically-minded manipulators, who make invidious comparisons between worthy candidates. These candidates are in no position to refute rumors, or to defend themselves otherwise. Manipulators are afforded time and opportunity to instruct their followers to vote this way or that, and it is possible for a block of thirty voters who have little interest in the Society, except at election time, to put into office any candidate their boss shall decide upon. All this has no proper place in a scientific society. The rule which requires presence at the Medical Society between certain hours on a certain day is unsatisfactory, for the reason that some members are ill, some are old, some are disabled, some are too busy, some are procrastinators, and some are just careless. All of these should have an opportunity to express their preference, and I am offering these suggestions in an effort to provide a proper and satisfactory and fair method of electing candidates to office.

1. The Executive Committee shall draw from a hat which contains the names of all active members, thirty names. These names shall be mailed on a ballot within twenty-four hours of the time they are drawn. Members receiving them shall be instructed to vote for seven and to return the ballots within ten days to the Society. The members receiving the seven highest number of votes shall constitute the Nominating Committee.

2. The membership of the Nominating Committee shall not be made known to the Society, or to the other members of the Nominating Committee, until their first meeting. They shall be notified individually of their election, with instructions to attend the Nominating Committee meeting to be called within one week. At this meeting, the Committee shall organize, and select, not over two names for each office to be voted on by the Society.

Within twenty-four hours of the meeting of the Nominating Committee, ballots shall be mailed to the active members of the Society, with instructions that, in order to be counted, they must be marked and returned to the Society within ten days of their receipt.

A majority of the votes received shall constitute election. Announcement of the result may be made the first meeting in May.

Sincerely,
JAMES A. GANNON, M.D.

EDWARD FERGUSON PICKFORD, M.D.
(1868–1944)

Dr. Edward F. Pickford, a Life Member of the Medical Society of the District of Columbia, died May 6, 1944, at his home, 1838 16th Street, N.W., following a brief illness.

Dr. Pickford was born in Schenectady, New York, July 25, 1868. After receiving his A.B. degree from Union College in 1890, with the intention of entering the field of engineering, he suddenly decided to abandon his plans for such a vocation in favor of a medical career. He immediately enrolled in Albany Medical College and in 1895 received his degree in medicine.

Moving to Washington late in the same year, he opened his office at 422 Eighth Street, where he practiced his profession until his death, a period of forty-nine years. For the past year he has been assisted by his son, Dr. Edward Morse Pickford, who is also a member of the Medical Society.

Dr. Pickford was elected to Active Membership in the Medical Association of the District of Columbia in 1896 and became a member of the Medical Society in 1901. He has been a Life Member since January 1, 1937. He was a Fellow of the American Medical Association and a member of the Clinico-Pathological Society.

In addition to holding the office of Vice President of the City Bank for several years, he served as a director of that bank for a number of years. In 1906 he was tennis champion of the District of Columbia. He was a member of the University Club, a charter member of the Racquet Club, and a member of the old Dunbarton Club. He also had maintained his membership in Sigma Xi, honorary fraternity in engineering.

Surviving are his wife, Mrs. Caroline Horstmann Pickford; a son, mentioned above; and a sister, Mrs. Morris Blau of Schenectady, New York.

JOHN PAUL EARNEST, JR., M.D.
(1898–1944)

Dr. John Paul Earnest, Jr., well known internist, died at Emergency Hospital, May 8, 1944, after an illness of several weeks. He maintained his office at 2025 R Street, N.W. and resided at 1701 21st Street, N.W.

A native Washingtonian, born November 22, 1898, Dr. Earnest was widely acquainted in the District of Columbia, having attended Force School and Western High School. He received his A.B. degree from George Washington University in 1921 and also his M.D. degree, the latter from the School of Medicine in 1923. His father, the late John Paul Earnest, was for many years Chairman of the Bar Examining Committee of the District of Columbia, Professor of Law and one of the founders of Columbian College, now George Washington University.

Dr. Earnest began private practice in the District of Columbia in 1926. He was member of the visiting staffs of both Emergency and Doctors Hospitals. He was a Fellow of the American Medical Association, and was elected to Active Membership in the Medical Society in 1927.

Surviving are his wife, Mrs Marie Hawkins Earnest; a daughter, Martha Earnest, and his mother, Mrs. Elizabeth D. Daniels Earnest, all of Washington. A sister, Mrs. G. Baillie Springston, resides in Bethesda, Maryland.

(*Continued from page 216*)

local hemorrhage, and both made good recoveries. The third case, that involving the fourth dorsal, had a complete laceration of the cord and a hemothorax. This case terminated fatally on the fourth day.

Burns are rarely encountered in land warfare. The most frequent cause of burns in forces operating ashore is the result of gasoline being thrown on a fire around the galley. We did, however, receive a large number of naval casualties. In one group of these casualties, there were 67 burn cases involving 20 to 40 per cent of the skin surface. Each of these 67 patients received an average of 5,000 c.c. of plasma within 48 hours, plus enough saline and glucose to maintain a urinary output of over 1,000 c.c. daily. Nearly all of these patients received their plasma via the femoral vein, because burns on the arms and legs make the usual veins inaccessible. The burns were treated locally with 5 per cent sulfanilamide ointment saturated in gauze with compress dressings. Many of these patients had other wounds, but all were saved. We had these cases nearly 4 weeks, and by keeping the burns of the face thoroughly covered with sulfanilamide ointment, there were no contractures of the eyelids.

(*Continued from page 220*)

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(*Continued from page 222*)

anaerobic spore-forming bacteria was obtained on culturing. Mice injected with some of the culture developed typical tetanus symptoms and died, while mice receiving the same amount of culture plus tetanus antitoxin have survived without symptoms of tetanus."

Dr. Herbert Schoenfeld commented as follows: "This case report, with recovery, demonstrates the thesis enunciated, that large doses of anti-tetanus serum may be insufficient to counteract the toxin produced by tetanus bacilli at their focus of infection. There is also offered an example of a relatively clean wound retaining the specific organism of tetanus over a relatively prolonged period of time and having the symptoms of the disease completely relieved by radical, wide, deep excision of the focal area of infection. No claim is made for surgical as opposed to good medical management of tetanus. Good practice would indicate the advisability of better surgical management as an important adjunct to medical and specific treatment."

I am indebted to Dr. Joseph S. Wall for the privilege of reporting this case from his service.

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(*Continued from page 239*)

From Captain Clyde P. Reeves, c/o Postmaster, New York City:

Dear Mr. Wiprud:

Your letters are always received with great interest here. Colonel Morse, my C.O., and I always talk over the news that is contained in them and get great pleasure reminiscing about our old friends both at home and abroad.

Our setup here is very good and we are doing a land office business. We have some prefabricated buildings, stone houses, but patients are housed entirely in tents. We are located immediately on the Mediterranean and to our back are beautiful snow-capped mountains. Better climate and scenery cannot be found.

Give my best wishes to our members and tell them that Colonel Morse and I are hoping to soon be back with them.

From Lt. Colonel Edward J. Grass, c/o Postmaster, San Francisco, Cal.:

Dear Ted:

Hello! Am still out here in the southwest Pacific with very little prospects of getting back to the States soon. But we still have a job to do, so I just sit back, relax (like all docs should, but don't), puff on a 20 Grand, and put on that big smile. The ballots arrived today and hope it gets back in time in case of a tie.

Am looking forward to your next letter.

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII | *July, 1944* | NUMBER 7

THERAPY OF BURNS

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DURING the past decade two great advances have been made in the field of surgery. The first is the use of plasma in the treatment of shock, and the second is in the therapy of wounds. Outstanding among the latter is the modern care of burns.

A burn represents thermal injury to the skin and underlying tissue, and is the most extensive kind of an open wound. It is usually classified according to its depth into first, second and third degree burns. A first degree burn is manifested by a mild blush or erythema of the skin, second degree by blister formation, and third degree by charring of the tissues. A third degree burn never blisters because the skin is entirely destroyed and takes on a dull grey, untanned, leather-like appearance. The degree of the burn is of less importance than the surface which it covers. Although it has been said that a burn covering over one third of the body surface is usually fatal, this statement has never been true. In the past, burns of a much smaller area have often proved fatal, and at the present time many patients with burns covering a much more extensive area have recovered. Since the palm of the hand represents roughly 1 per cent of the body surface, we can readily determine the extent of the burn by using this unit of measurement.

Death of skin causes loss of protection of the body from infection, loss of function of the sweat and sebaceous glands, and loss of the mechanisms for fluid balance. There is retention of waste products because of the failure of sweating and concentration of the blood by loss of serum from the burned area. This concentration of the waste products of the blood is now generally accepted as the cause of the associated physiopathologic changes which take place in the body following a burn. This view has supplanted the toxic theory of burn shock which was believed for so many years and is still given in many of our modern textbooks in surgery. No one has ever been able to isolate indol or skatol or histamine or any of the many other substances claimed to be the cause of the toxic phase of burn. A great deal of excellent experimental work has been done by Blalock, Harkins, Underhill and many others, and the result of their work has been the discounting of the toxic theory and supplanting it with a more physiologic approach to the treatment of burns.

SYSTEMIC TREATMENT

When a burn is first encountered, three problems immediately present themselves. These are shock, dehydration and infection. Shock and dehydration are usually treated simultaneously and are the cause of death in the vast majority of cases during the first 24 hours. Death due to infection occurs after days have elapsed and septicemia has developed.

Immediately following an extensive burn the patient will be in severe shock. This can be overcome by the administration of heat in the form of hot drinks and by wrapping the patient in blankets. It has been dramatically demonstrated by Blalock that an individual suffering from shock can be definitely injured and his recovery retarded by the application of too much heat which produces retention of fluid in the tissues. Warm blankets with one or two well padded hot water bottles will furnish sufficient warmth. Morphine should be given in large doses to relieve pain. It is unquestionably true that the pain suffered from a burn is an important factor in prolonging shock. Doses of narcotics twice the normal amount, such as $\frac{1}{2}$ grain (0.03 Gm.) of morphine, will often be necessary to bring comfort.

Serum is rapidly lost from all burned areas, and this may amount to from 4,000 to 6,000 c.c. in 24 hours. This is an enormous quantity and has to be rapidly replaced, or irrevocable damage to the tissues will result from dehydration and hypoproteinemia. It is regrettable that the extent of this loss of body fluid has not been realized, and in replacing it 500 to 1,000 c.c. of plasma has often been deemed sufficient.

A hematocrit determination or a red blood count will tell the amount of hemoconcentration. Harkins has recommended a very simple rule which consists in giving 100 c.c. of plasma for every point that the hematocrit determination exceeds the normal of 45. If estimations of hemoglobin are used instead of hematocrit determinations, the dosage of plasma should be 50 c.c. for every point that the concentration of hemoglobin exceeds the normal of 100 per cent. This dosage applies to adults and assumes that before the burn the blood concentration was normal. Plasma may be given subcutaneously if the intravenous route is not available. When plasma is not available, whole blood may be given, but this may prove harmful if the serum loss from the burn continues, because as the liquid portion of the blood leaves the tissues the red cells remain; and to produce further hemoconcentration will only increase the degree of shock rather than lessen it. Later, when shock has been overcome, plasma is not needed, but whole blood will hasten recovery, since most severely burned patients develop anemia and may have to be transfused 2 or 3 times. It may be stated that the National Research Council in its recently published manual on burns has decried the use of the drip method in administering plasma. A patient needing plasma needs it quickly, and they advise using a large needle and allowing the plasma to flow at the rate of 10 c.c. per minute.

Aside from plasma, other fluids are not needed in as large quantities as formerly believed. A good rule to follow is to give an equal amount of crystalloid solution to plasma administered.

It must be remembered that in a state of hypoproteinemia sodium chloride may intensify local edema, and as long as hypoproteinemia exists, plasma should be given. A diet rich in proteins will also aid in preventing hypoproteinemia. In this regard, amino acids may also be given, but their use has not been universally adopted.

Glucose solution is an excellent aid in preventing liver necrosis and should be given if adequate carbohydrates cannot be taken by mouth.

Diets rich in vitamin C will aid in promoting healing.

In any extensive burn, hemoconcentration is associated with anoxia of the tissues, and this condition can be anticipated and combated by the early administration of oxygen.

Tetanus antitoxin and anti-gas sera should be administered to every extensively burned patient and particularly in the case of third degree burns in which the subcutaneous tissues are destroyed.

Chemotherapy is very important and should be immediately instituted. The local use of drugs in the form of greases or oils is no longer advised. It has been definitely shown that the sulfonamides are much more efficacious when given systemically, and definite control of the drug can be maintained by this method. In the presence of blood concentration, far less of the drug is needed to bring about high saturation levels.

Local Care of the Burned Area

The local care of the burn should start the instant the burn occurs. The general public should be acquainted with the fact that a burn is an open wound and should be treated in such a way that infection will not gain entrance to it. In this regard the use of oils and greases and all the other "fire house remedies" should be discouraged.

Immediately after a burn occurs the individual or part should be wrapped in a clean sheet or cloth and clean blankets applied. The patient should then be transported to the hospital and shock therapy immediately instituted. An initial dose of plasma should be given and blood taken for a blood count and a hematocrit estimation. A urinalysis is performed if urine is obtainable.

Definite local therapy is not done in the emergency room. The patient is not disrobed until he is transported to the operating room. Here an attendant, masked and gowned, removes his clothes. From now on the technic is as rigid as that required for any operation. This is a most important factor, and it is in the prevention of contamination that the greatest advances have been made in the treatment of burns. The patient is now placed on a sterile sheet and covered with sterile blankets.

The physician and his assistants, who are all masked and gowned, wearing sterile gloves, now clean the burned area with white soap and water without vigorous rubbing. All blebs are opened and all dead skin removed, and gentleness is the watchword. Anesthesia need not be used in the majority of cases if sufficient morphine has been given. If it is necessary, an intravenous anesthetic such as Pentothal Sodium is ideal. After thorough removal of all devitalized skin the area is flushed with warm normal saline and the entire burn covered with sterile fine meshed gauze. Over this is placed a layer of gauze flats and then a thick bulky dressing of sterile mechanics waste or washed gauze. The entire dressing can now be wrapped in cellophane or oiled silk, and pressure can be maintained by wrapping the dressing with an elastic bandage. An A C E bandage is ideal for this.

If infection does not occur, this dressing is allowed to remain in place for 14 to 21 days, and when it is removed, if the wound is not healed, the first layer next to it is not disturbed and pressure is again applied by a similar dressing. If infection does occur, the dressings are removed, the wound irrigated and the pressure dressing reapplied.

Any wound that is not healed after 28 days should be grafted. In the case of third degree burns the first dressing will show sloughing of the dead skin and a granulating area surrounding it. This slough can be removed and the dressing reapplied for another week. At the end of this time the dressings are again changed, and if the granulations are clean and healthy, grafting can be done. In some of the cases of burns that followed the Coconut Grove disaster skin grafting was done as early as the third week after the injury.

When an extremity has been burned the part should be immobilized with splints in the optimum position of function. In the case of the neck, the head should be hyperextended and held this way with splints.

As soon as the burned area has epithelialized, physiotherapy should be started. This will prevent many contractures and will hasten full recovery.

In conclusion, it should be repeated that the following procedures have revolutionized the treatment of burns:

(*Continued on page 281*)

A COMPARATIVE STUDY OF THE ACTION OF GLOBIN INSULIN WITH OTHER FORMS OF INSULIN*

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THE control of the blood sugar level is influenced by many factors, some extrinsic, others intrinsic. The extrinsic factors are more readily adjusted, i.e., diet, exercise, environment, etc., but the intrinsic factors are a labyrinth of complexities, affected by the glands of internal secretion and the paramount nervous mechanism.

Whether one accepts Wilder's theory of insulin deficiency as purely a pancreatic problem or associates diabetes with pluriglandular disease, imbalance, or what not, is a matter of conjecture. All agree that the use of a regulated diet and insulin has given the best therapeutic response.

Nevertheless, with the advent of insulin it has become possible for the diabetic to live longer, and with longevity new problems have presented themselves. These problems have become especially important in the severe diabetic, who prior to insulin days usually succumbed to diabetic coma, with a percentage rate of 60.8 as compared to 3.3 today, thanks to insulin.

One must also recognize the fact that some of the mild diabetics become severe as a result of infection, pregnancy and glandular disturbances, such as overactivity of the thyroid, pituitary, adrenal or other glands. Arteriosclerosis has added another burden to the diabetic, which prior to the use of insulin played a minor role, the patient not living long enough to enter into this complication. Insulin atrophy has added to their distress and with arteriosclerosis may be a factor of irregular insulin action, particularly seen with protamine zinc insulin.

Mild diabetics can be controlled usually on regulated diets; some may require insulin. The moderate and severe diabetic requires insulin in addition to a measured diet. In this group of patients regular, crystalline or protamine zinc insulin has answered the purpose. Protamine zinc insulin has been of great value, especially in reducing the number of injections, and in the case of diabetics with nocturnal hyperglycemia which caused the need for injections of standard insulin at night or early in the morning.

However, the severe unpredictable insulin reactions experienced with protamine zinc insulin, the cutaneous reactions with either standard or protamine zinc insulin, the hangover from protamine zinc insulin, and the varying blood sugar curves obtained in patients in spite of a stable diet, activity, and insulin and in the absence of infection or recognized glandular disturbances, have caused the quest for further insulin perfection.

Regular and preferably crystalline insulin (solution of zinc insulin crystals) are still the choice in diabetic emergencies. They are the only forms of insulin that can be given intravenously.

Because of the difficulties arising with the use of standard and protamine zinc insulin a study of the use of globin insulin was undertaken at the Diabetic Clinic of the George Washington University Hospital.

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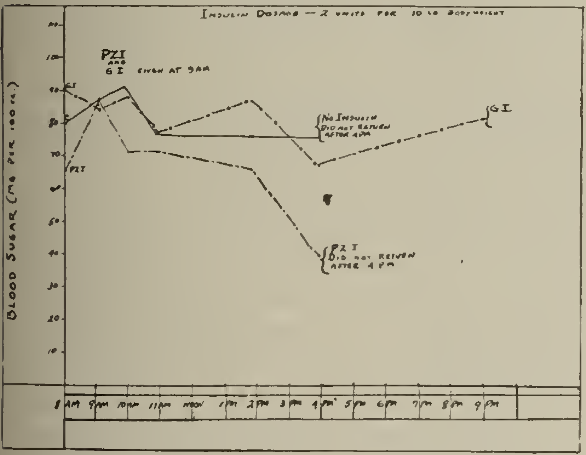
* Read before the George Washington University Medical Society, March 18, 1944.

Reiner, Searle and Lang[1] first prepared globin insulin, a product resulting from the combination of insulin with globin, a factor obtained from the red cell freed of its iron-containing chromogen fraction. Globin insulin at pH 4 or less forms a clear solution, at a pH between 5 and 8 a precipitation, and at pH 6.1 optimal flocculation. It is a clear, colorless aqueous solution containing 80 units of insulin per c.c., 3.04 mg. of purified globin, and 0.24 mg. of zinc in the form of zinc chloride per c.c. In addition, the preparation contains 0.18 per cent cresol. In the final product the pH is about 3.7. It maintains stability for a year when kept in refrigeration.

CHART 1

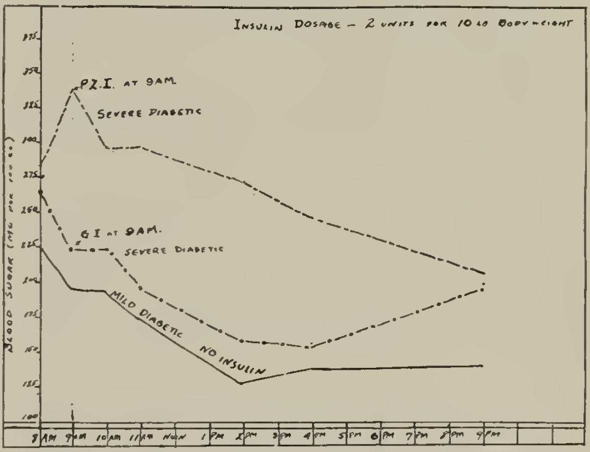


Blood sugar curves of 3 normal medical students under conditions outlined in text.

The patients selected for study presented problems of nocturnal hypoglycemia, and in some, with grave threats; those with cutaneous reactions; and those who had become difficult to control with protamine zinc insulin alone or in combination with standard insulin in separate injections. For comparative studies an attempt was made to evaluate the effect on the blood sugar curve of 3 normal medical students and 3 diabetic patients under the following conditions: (1) fasting, (2) fasting followed by an injection of globin insulin, 2 units per 10 lbs. of body weight, and (3) fasting followed by an injection of protamine zinc insulin, 2 units per 10 lbs. of body weight (charts 1 and 2).

The action of globin insulin in my experience revealed a lowering of the blood sugar in 2 hours, in contrast to the action of regular insulin, which begins within 15 minutes as a rule, although in 2 test patients the action began at the third and sixth hours respectively. In 1 patient it showed very strong action between the third and sixth hours only to fade out completely 5 hours later, with the blood sugar level 250 mg. higher than the fasting level. Protamine zinc insulin requires from 4 to 6 hours to elicit any diminution in the level of the blood sugar. But in both the control subject and the severe diabetic patient the action of protamine zinc insulin was seen in 1 hour. This is the exception and not the rule. The action of globin insulin was greatest between the fifth and seventh hours and continued its lowering effect on the blood sugar for another 5 to 7 hours. Therefore, from my experience the action may last from 12 to 16 hours and then wane. Protamine zinc insulin shows its greatest action between 12 and 16 hours and then continues to 24 hours with a carryover. No carryover was seen with globin insulin.

CHART 2



Blood sugar curves of 3 diabetic patients under conditions outlined in text.

In 1 insulin-resistant patient with very irregular protamine zinc insulin action the blood sugar dropped 452 mg. 10 hours after globin insulin was given. Here very strong globin insulin action was seen.

Reactions with globin insulin, except in 3 cases out of a total group of 50 patients, were not as severe as with protamine zinc insulin, but as with protamine zinc insulin the reactions were abrupt. Profuse sweats, confusion, mental dullness with failure to take carbohydrates or sugar carried on the person, headaches and nausea were observed in varying degrees. Regular insulin has one definite advantage in that the patient usually has definite warning of impending shock with numbness of the lips, a jittery sensation, perspiration, or quickened alertness for a brief moment followed by confusion. A more definite relation of reaction to the time of insulin administration is usually seen with regular insulin.

Globin insulin curves indicate expected hypoglycemia from 2 to 6 p.m., and with proper carbohydrate distribution severe reactions may be avoided. The carryover with protamine zinc insulin may make it more difficult to judge the time of reactions.

The patients selected for study were formerly on protamine zinc insulin and were having severe reactions more frequently. The reactions from globin insulin, with the 3 exceptions, were milder and were recovered from more easily.

With conversion from the employment of protamine zinc insulin to that of globin insulin 2 patients failed to show the effect of the globin insulin for about 17 hours, and then the action became prompt and effective and henceforth showed usual effect. The dosage was regulated by using two thirds to three fourths the amount of insulin used previously and gradually increasing or decreasing the amount as needed.

It was observed that conversion from protamine zinc insulin to globin insulin did not offer any difficulty beyond the necessity of reducing the dosage. In 1 instance in which no reduction in dosage was made reactions were promptly noted. I am also mindful of the 2 patients with no action for 17 hours.

In some of our patients in whom the action of globin insulin was not sufficiently effective, protamine zinc insulin was added and the dose of each insulin adjusted to overcome the peak and valley of blood sugar levels, and better control was obtained than on either one alone. Similar experiences were noted with combinations of globin insulin and regular insulin, of course not given in a single dose.

Irregularity of insulin action may be due to many factors. Technical errors in administration are the easiest to correct: measuring insulin dosage to exactness of units desired, gentle rotation of the protamine zinc insulin bottle to assure proper mixture, depth of injection to secure subcutaneous tissue levels, proper temperature of stored protamine zinc insulin, rubber cap security with possible damage to rubber permitting oxidation, expiration date, and effective remaining insulin once usage has begun.

Absorption of insulin is another factor to be considered. Reiner, Lang, Irvine, Peacock and Evans[2] have shown with rabbits that only 22 per cent of injected crystalline insulin remained at the site of injection at the end of 5 hours. Globin zinc insulin was more slowly absorbed, but protamine zinc insulin was most gradually removed, so that 60 per cent of the protamine zinc insulin remained at the site of injection at the end of 10 hours.

Root et al[3] reported that "it is conceivable that in a patient with moderately severe diabetes a condition of insulin hunger exists in contrast to the condition of the nondiabetic subject who has a normal supply of insulin from his own pancreas. Therefore the rate of absorption of injected insulin might well be slower in normal than in diabetic tissue." Furthermore, repeated subcutaneous insulin injections may cause inflammatory changes, fibrosis, lipomatosis and fatty atrophy, as recently reported by Root.

According to the studies of Page and Bauman,[4] globin insulin is devoid of toxicity when injected into animals or tested on tissues or monocellular organisms, whereas protamine zinc insulin is toxic to tissues and trypanosomes. Sensitivity to protamine was much greater in allergic patients. In his group reactions to protamine were 24 times more frequent than to globin.

Only 1 of my group of patients had cutaneous reactions. In this patient a small lump was felt for hours after the injection of globin zinc insulin. It was in this patient that a 17-hour lapse of time was observed before the action of globin insulin became effective.

This series is far too small and lacks sufficiently detailed study and observation over a long enough time to draw conclusions in regard to the advantage of injections of globin insulin in subcutaneous tissues as compared to other insulins. In 2 patients quite allergic to protamine zinc insulin, globin insulin produced no reaction, and cutaneous changes were not noted in any of the remaining group with exceptions as noted above.

Globin zinc insulin as tested in this series of patients has revealed a smooth course of action with less tendency to irregular blood sugar levels, definite afternoon hypoglycemia peak effect, continuous effective hypoglycemia action for at least 12 hours and fading action for another 4 to 8 hours. There was no nocturnal hypoglycemia except in 1 patient. There was apparent success in cases in which protamine zinc insulin caused marked nocturnal hypoglycemia except as noted. Most patients were controlled with 1 injection, although some were controlled with the addition of protamine zinc insulin or regular insulin.

Dietary management should afford the patient a carbohydrate intake of 140 to 300 grams per day with a 1/5, 2/5, and 2/5 carbohydrate ratio of breakfast, lunch and dinner. Allowance of 5 to 10 per cent is made in the afternoon to offset the peak of hypoglycemic action. One may allow a division of diet as 1/5, 3/5, 1/5 in patients prone to have too great globin insulin action in the afternoon. Carbohydrates in the form of fruit juices are a source of quick available sugars and should be avoided when prolonged carbohydrate action is desired. Fats delay carbohydrate absorption and should be employed when such action is desired.

Proper distribution of the carbohydrate with proper insulin timing will afford best therapeutic response.

Burroughs-Wellcome globin insulin was used in my test patients.

The ideal in the management of a diabetic is to dislocate the patient's normal habits as little as possible; to secure blood sugar levels within acceptable normal range; and when insulin is used to allow the blood sugar level to range between 140 to 150 mg. per 100 c.c. of blood and keep the urine sugar-free, although slight sugar spills are not harmful and may serve as a safety measure against too low blood sugar levels; and to keep the patient's weight normal and avoid sudden drastic weight reductions. The patient must be educated to understand his problem intelligently, as to diet, prevention of complications and testing the urine for sugar.

The mild diabetic under a well planned diet may secure this ideal with the least disturbance, but the more severe diabetic must take insulin. If the patient has been regulated on a brand of insulin, even if taking 2 injections a day, it is best not to change the brand of insulin as long as the problems of hypoglycemia, allergy or cutaneous changes do not exist. However, in the presence of any of these distress factors, a change in insulin may be essential. My experience with protamine zinc insulin has shown it to have wide usage with great advantage over regular insulin.

Globin insulin has been found to have additional merit, and when nocturnal hypoglycemia, cutaneous changes or allergic reactions occur, this insulin may serve to overcome these difficulties, and therefore deserves a place in our armamentarium.

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FURTHER OBSERVATIONS ON CONTINUOUS CAUDAL ANESTHESIA *

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SINCE our original article[1] on 100 obstetrical cases delivered under continuous caudal anesthesia, we have used this method in an additional 125 cases and would like to report some further observations. We will not discuss the technic nor the physiology involved, since this has been covered thoroughly in other publications.[2, 3, 4, 5, 6]

RESULTS

Up to the present time we have used this method in 225 obstetrical cases. Our results are as follows:

Perfect results	168
Partial results	32
Failures	25
Total	225

By partial results in obstetrics we mean that relief from pain was obtained for some hours during the labor, but that the patient began feeling her contractions before its termination. When this did occur, it usually happened when the cervix was completely dilated and was more common in posterior positions. However, in 50 per cent of these cases delivery was effected without supplementary anesthesia.

We have also treated 11 cases of acute pelvic thrombophlebitis with continuous caudal anesthesia, using it as a form of sympathetic nerve block. The results obtained have been excellent and warrant further investigation.

METHODS

There are 3 methods used in giving and administering caudal anesthesia:

1. The malleable needle method
2. The ureteral catheter method
3. The continuous drip method.

The malleable needle method consists of using the specially designed needle of Hingson and Edwards and administering the solution in fractional doses according to the needs of the patient.

The ureteral catheter method consists of inserting a small ureteral catheter through a large needle which has previously been introduced into the caudal canal.

The third method, continuous drip, is used either in conjunction with the special malleable needle or the ureteral catheter and is given continually rather than fractionally, the rate of flow being determined by the height of the anesthesia.

We prefer the fractional malleable needle method, because the insertion of the large caliber needle into the caudal canal is much more difficult and more apt to be attended with trauma. Also, after threading the catheter through the large needle there is a greater chance of the catheter passing through one of the sacral foramina and so giving a partial anesthesia. The chief advantage of the catheter method is that the possibility of a needle breaking in the canal is obviated. We feel that the malleable reinforced needle B. D., which we discard after using 5 times, represents a minimum danger of breaking. We have not had a needle break in any of our cases. Continuous drip anesthesia practically necessitates continuous testing of the level of anesthesia and offers no advantages over the method which we employ, but it increases the potential dangers as has been shown by the recent literature in which the levels of anesthesia have progressed to dangerous heights.

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* From the Obstetrical Department of Providence Hospital.

INDICATIONS IN OBSTETRICS

In obstetrics not every patient is a suitable candidate for caudal anesthesia, but there are certain specific conditions in which this method should be the anesthetic of choice.

1. *Prematurity.* The greatest factor in the death rate of premature infants is their tendency to cerebral accidents. This tendency can be lessened by caudal anesthesia because of the marked softening and relaxation of the cervix and pelvic floor structures, which decreases intracranial pressure.

Also, all sedatives, amnesics and inhalation anesthetics have been shown to be transplacental and so exert a depressing effect on the vital mechanisms of the fetus. This factor is obviated by caudal anesthesia.

2. *Heart disease.* When the cardiac patient comes to term fully compensated, her best chance for maintaining this balance is by keeping her physical and emotional strain at a minimum. We feel this can be done best under caudal anesthesia, in which she lies quietly without apprehension and is not expulsively straining in the second stage.

3. *Pulmonary disease.* Any patient with an acute or chronic respiratory disease is better off without an inhalation anesthetic.

4. *Renal disease.* The same holds for renal disease regardless of type.

5. *Toxemias of pregnancy.* Our observations in toxemias delivered under caudal anesthesia are in accord with the findings of Hingson and Edwards. The blood pressure is lowered, the urinary output increased, and the patient's general condition improved, thereby lessening the danger of accidents.

6. *Cervical dystocia.* Many cases of cervical dystocia that formerly would have been considered candidates for cesarean section can now be delivered under caudal anesthesia. The softening and relaxing effect of this type of anesthetic on the cervix will enable the majority of these patients to be delivered from below.

7. *Full stomach at time of delivery.* General anesthesia is contraindicated because of inherent dangers of aspiration, pneumonitis, atelectasis, etc.

Many obstetricians feel that cesarean sections should be done under some form of anesthetic which does not depress the vital mechanisms of the fetus. Local, spinal and caudal anesthesia answer this purpose. Although we have not used any of these methods, we would not hesitate to employ caudal anesthesia in cesarean section when the indication presents itself. The technic is essentially the same except that a larger initial dose (60 c.c.) must be given in order to raise the anesthesia to a high enough level. The low-cervical operation would be the one of choice under this form of anesthetic.

CONTRAINDICATIONS IN OBSTETRICS

There are certain types of patients and conditions in which caudal anesthesia is definitely not indicated.

1. The psychically unsuited patient, i.e., the nervous and apprehensive type who borders on the hysterical. Although the anesthetic is perfect, she will find something to complain of and is better off asleep during delivery.

2. The obese individual whose sacral hiatus is difficult to palpate.

3. The multigravida with a history of fast labors. Frequently these patients are ready to deliver before the anesthetic has taken effect.

4. Patients with anomalies or infections about the sacrum.

5. Placenta previa or premature separation.

6. Cephalopelvic disproportion.

7. Previous cesarean section in which the patient is allowed to have a trial labor.

DANGERS[7]

1. *Intraspinal injection.* It would be fatal to inject a large amount of this solution intradurally, and we have carefully observed these 3 precautions to be sure we are not in the spinal canal:

a. No spinal fluid should appear after removing the stylet from the special malleable needle.

b. No fluid should be aspirated from the needle from its original position or after rotating it through 180°.

c. There should be no anesthesia of the lower extremities after an initial injection of 8 c.c. and a 10-minute observation period.

When satisfied we are not in the spinal canal we then inject 22 c.c.

If the full dose of 30 c.c. is accidentally introduced into the subarachnoid space, a massive spinal anesthetic will have been given and treatment should be instituted immediately.

The patient should be supported in the sitting position and a lumbar puncture done with a large needle so that the fluid will flow rapidly. About 100 c.c. of spinal fluid should be withdrawn. The flow can be hastened by compression on the jugular veins. Forced drainage can also be accomplished by giving 0.45 per cent saline solution intravenously, with the lumbar puncture needle still in place.

It is extremely important that the drug should be drained off before it reaches the vital centers in the brain. Even though the respiratory center is anesthetized, the method should still be tried in order to prevent involvement of the vasomotor center, which is at a higher level. Drop in blood pressure and shock should be combated with ephedrine, stimulants and intravenous fluids such as plasma.

Respiratory paralysis must be treated by artificial respiration and oxygen inhalation. We keep a lumbar puncture set ready for use at all times in the delivery room.

2. *Infection.* This is usually due to faulty technic. Apparatus must be sterilized; the area of injection must be prepared the same as for any major surgical procedure; sulfathiazole ointment should be placed about the needle.

3. *Intravenous injection.* If blood is obtained, the position of the needle must be changed until no blood can be aspirated.

Evidence of intravenous injection is characterized by the patient becoming irrational, talking incoherently, and having mild clonic convulsions of the upper and lower extremities and opisthotonos. These symptoms usually pass off in a few minutes.

Barbiturates counteract the untoward effects of any of the cocaine derivatives, and we usually give nembutal in 3-grain doses orally before starting the injection. We find that our incidence of reactions is reduced to a minimum.

If an intravenous injection be given, one of the quickly acting barbiturates, such as evipal sodium or pentothal sodium, given intravenously, should relieve the convulsions immediately.

When caudal anesthesia is used, it is well to have one of these drugs immediately available.

4. *Idiosyncrasy.* The patient should be questioned as to a history of allergy, particularly concerning any previous reaction to these drugs, e.g., reaction occurring when having a tooth pulled with novocaine. Response to the metycaine solution used for infiltrating the skin before introduction of the caudal needle should give us a clue as to any sensitivity to the drug.

If a reaction occurs, epinephrine should be given hypodermically and convulsions controlled with intravenous bartiturates.

5. *Injury to nerve roots.* This complication occurs very infrequently and can be kept at a minimum by using the small 19-gauge malleable needle.

6. *Breaking of needle.* This event is obviated by using a malleable needle and discarding it after using it 5 times.

OBSERVATIONS

In the multipara we start the anesthetic as soon as she is in active labor and beginning to complain of her contractions, regardless of the condition of the cervix. In the primipara it is well to wait until the cervix is fairly well effaced and about 3 to 4 cm. dilated. We feel it is a mistake to start the anesthetic too early in primiparas.

To us analgesia by the continuous caudal route has a definite advantage over any of the other methods, such as the use of morphine hypodermically, of any of the barbiturates orally, of paraldehyde or of ether and oil by rectum. The caudally anesthetized patient is wide awake, has complete control of her faculties, is coöperative and is able to take nourishment and fluids. Patients under sedation heavy enough to relieve pain have lost control of their faculties, are uncoöperative, cannot take fluids, and become dehydrated after many hours of labor.

After the initial caudal injection is made, the patient requires very little of the nurse's time, whereas the heavily sedated patient must be watched constantly.

Caudal anesthesia tends to shorten labor in both the first and second stages. This is particularly true when one is dealing with a long, hard, resistant cervix that will not dilate readily. The uterine contractions are not interfered with in any way, and yet the marked softening of the cervix and pelvic floor muscles offer less resistance to the presenting part, and consequently labor is shortened. However, once the caput reaches the introitus it may remain there for some time unless labor is terminated by low forceps or unless the patient is asked to bear down with her contractions. Multigravidas with relaxed outlets can be delivered by this latter procedure, but those who have had good episiotomy repairs, as well as primiparas, nearly always have to have their labor terminated by outlet forceps.

Fetuses in posterior positions tend to come down completely posteriorly or to rotate into transverse arrests and remain there. This is explained by the fact that the marked relaxation of the soft tissues interferes with the flexion of the head and subsequently with its internal rotation. This is, however, compensated by the fact that rotation of the head and the application of forceps are made easier.

We have also noticed that in posterior positions, when the head descends through the pelvis, the patients complain of severe back pain which cannot be relieved by the caudal anesthetic, and yet these same women can be delivered with forceps and have an episiotomy repair with no supplementary anesthesia.

The uterus contracts well and remains firm, and the placenta separates readily and may be expelled by gentle pressure on the fundus. The blood loss is considerably less than under inhalation anesthesia, usually about 50 to 100 c.c. We usually give ergotrate intramuscularly in the buttocks after the third stage. Our findings are essentially the same as those recently reported by Vaux[8] in his review of 1,000 cases.

After 3 to 4 hours under anesthesia the patient should be catheterized, since the bladder fills more rapidly because of the vasodilatation of the afferent glomerular arterioles, which promotes diuresis. These patients are unable to void due to a blocking out of the micturition reflex.

Occasionally we have had cases of unilateral anesthesia after the first injection. This usually occurs on the dependent side and can often be eliminated by rotating the needle through an arc of 180 degrees and injecting more of the solution. If the unilateral anesthesia persists, it is well to turn the patient on her opposite side. Should both procedures fail to correct the condition, we then discontinue the anesthetic because there is either a sacral septum or hematoma blocking the flow of the solution, or the needle is incorrectly placed.

It should be realized that the caudally anesthetized patient has a full return of all sensation within 45 minutes after delivery and, hence, is more conscious of her perineal pain. Therefore, we make it a practice to give $\frac{1}{4}$ grain (0.16 Gm.) of morphine and $\frac{1}{150}$ grain of scopolamine (0.4 mg.) before she leaves the delivery room.

At the 6 weeks' postpartum examination the cervices of primiparas seem to be in better condition. There is less evidence of laceration, erosion and discharge. This may be explained by the fact that the cervix is so markedly softened under caudal anesthesia that it relaxes and dilates more readily and has less tendency to tear.

Summary and Conclusions

1. Continuous caudal anesthesia has a place in selected obstetrical cases and in the treatment of certain forms of acute pelvic thrombophlebitis.

2. There has been no mortality or morbidity in our series of 225 cases attributable to the anesthetic.

3. There are certain contraindications and dangers of which we should be aware. Strict adherence to technic, early recognition of complications, and the facilities for prompt treatment will keep accidents at a minimum.

4. The obstetrical patient is in better condition than when delivered under any other form of anesthesia.

5. The incidence of cerebral accidents in the newborn is lessened, and since the child is not narcotized by the anesthetic, it cries readily and resuscitation is rarely necessary.

6. Third stage blood loss is definitely less.

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New vaccine for poliomyelitis reported by three Chicagoans. A new vaccine for infantile paralysis is reported in *The Journal of the American Medical Association* for July 8, 1944, and results obtained in mice seem to offer encouragement as to its usefulness. The poliomyelitis virus is inactivated with a new technic of ultraviolet irradiation developed by a group of Chicago investigators.

Albert Milzer, Ph.D.; Franz Oppenheimer, Ph.D., and Sidney O. Levinson, M.D., Chicago, report that "Mice immunized with three doses of the irradiated poliomyelitis vaccine developed significant resistance to intracerebral inoculation and also specific serum neutralizing antibodies. The irradiated poliomyelitis vaccine exhibited no significant loss of potency after four and a half months storage at 3 C."

The new technic was first announced in *The Journal* of June 24. By it bacteria and viruses are completely killed or inactivated in less than one second by exposing them on continuously flowing thin films to ultraviolet rays from a newly developed lamp.

"The present paper," the three investigators say, "is a preliminary report on the preparation and antigenic studies of a completely inactivated vaccine prepared from the mouse adapted Lansing strain of poliomyelitis virus which not only evokes the formation of specific neutralizing antibodies in immunized mice but also confers a high degree of protection against subsequent intracerebral inoculation. . . .

"Although there are a few publications of the effectiveness of ultraviolet irradiation in destroying the poliomyelitis virus, to our knowledge no one has made antigenicity studies of irradiated poliomyelitis vaccines. It has been shown repeatedly that monkeys vaccinated with various completely inactivated poliomyelitis virus preparations develop little or no immunity, while active virus vaccines may stimulate immunity but are too dangerous for human use . . . "

Swiss mice were used by the three men. They say that "The presence of neutralizing antibodies against the Lansing strain . . . in undiluted pooled serums obtained from selected vaccinated mice was demonstrated as early as one week after a single dose of vaccine. One week after the second and third doses of vaccine the antibody titer had increased at least tenfold. . . . "

PYROGENIC REACTION TO THE USE OF THIOURACIL FOR EXOPHTHALMIC GOITER

Report of a Case

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THE use of thiouracil in the treatment of hyperthyroidism is still in the investigational stage. Its exact place in clinical medicine has not been established, but preliminary studies indicate that it may be of definite value, probably mainly for the purpose of preparing severely toxic hyperthyroid patients for operation. As with all therapeutic agents, not only must the favorable action be evaluated, but the toxic and allergic effects must be determined and the incidence and seriousness of these effects weighed against the beneficial effects. The present report demonstrates an adverse effect, which, although apparently not serious, necessitates withdrawal of the drug.

Thiouracil has been used for the clinical management of thyrotoxicosis (hyperthyroidism) since May 1943.[1] It is a derivation of the sulfur containing urea compound, thiourea, and is a white, odorless, crystalline powder having a bitter taste. It acts directly on the thyroid gland, inhibiting the formation of thyroxin in an unknown manner. Williams and Bissell[2] noted enlargement of the thyroid after its administration for several days and a marked decrease in the basal metabolic rate after several weeks. This change can be prevented by the administration of thyroid extract or by hypophysectomy but not by the use of iodine. Microscopic examination of thyroid glands that have been affected by thiouracil shows hyperplasia of the acinar epithelium and increased vascularity; and although this appearance is one of stimulation, the clinical result is that of depression of thyroid activity. Apparently there is frustration of an attempt to secrete thyroxin. At the same time thiouracil does not prevent the action of thyroxin administered parenterally. It does not act as a barrier between thyroxin and the end organ, the tissues, but so affects the acinar cells as to decrease the amount of thyroxin formed.

The drug is administered orally, is rapidly absorbed from the gastrointestinal tract, and is excreted in the urine in a short time, making several doses necessary for the establishment of an effective blood level. For prolonged use one daily dose is probably sufficient.

Toxic reactions occur but are usually of minor nature and in only rare cases warrant discontinuance of the drug. Astwood[1] treated 8 cases, 3 for thyrotoxicosis, and in 1 of the latter a skin rash developed that disappeared spontaneously, while in another agranulocytosis occurred with recovery after 7 days of almost complete absence of leukocytes from the blood. Himsworth[3] treated 6 cases of thyrotoxicosis with thiourea without toxic manifestations in spite of long-continued use in some of the cases. Williams and Bissell[2] treated 9 cases without serious toxic reactions; 2 patients developed slight transient swelling of the legs with slight increase in serum chlorides and decrease in the carbon dioxide combining power of the blood. Bartels[4] treated 11 severely toxic hyperthyroid patients preoperatively with thiouracil without toxic reactions. Pyrogenic reactions have been mentioned in the literature, but apparently not specifically discussed. The following case demonstrates such a reaction which precluded the use of the drug.

Report of Case

I. E., a colored female, aged 17, was admitted to the Georgetown University Hospital from the Outpatient Department on March 15, 1944, with the complaints of sore throat, swelling of the neck and tremor of the hands. Four months previously her employer had noticed a marked increase in nervousness while she was working as a file clerk. She had no other subjective complaints, but because of certain physical signs and a basal metabolic rate of plus 32 per cent it was decided to hospitalize her for study as a possible case of exophthalmic goiter.

Further questioning in the hospital revealed nothing suggestive of thyrotoxicosis. The patient's story was difficult to evaluate because she seemed to be in a continuously stimulated state and often rambled on for minutes at a time in a rush of words. There was nothing contributory in the past history or family history. She had had the usual childhood diseases and one pregnancy with normal course and delivery one year previously. There was no history of weight loss, intolerance to heat, fatigability or gastrointestinal disturbances. No drugs had been used, and venereal infections were denied.

Physical examination revealed a well-developed, well-nourished young colored female in a state of moderate stimulation. She was restless and moving about in bed continually. The eyes were prominent with widened palpebral fissures and moderate exophthalmos. A lid lag was present. The pulse rate was 120 per minute, and the blood pressure was 140 systolic and 55 diastolic in both arms. The thyroid was diffusely enlarged to twice normal size but there was no bruit audible. The apical impulse was forceful and diffuse, but no cardiac enlargement could be demonstrated. The heart sounds were loud and regular; no murmurs were heard. The lungs were clear, and examination of the abdomen and pelvis was negative. Laboratory examinations showed the following: normal hemogram and urinalysis, sedimentation rate within normal limits, negative blood tests for syphilis, basal metabolic rate plus 32 per cent on the day after admission, and blood cholesterol 162 mg. per 100 c.c. of blood. She was put on a high carbohydrate, high vitamin diet, bed rest and sedatives. The course in the hospital was uneventful. A repeated basal metabolic rate 6 days after admission was plus 19 per cent. The pulse rate varied usually between 80 and 110 without any definite pattern. At times it was as low as 65. The circulation time with magnesium sulfate was 7 seconds 2 days after admission, and 8 seconds 1 week later. The patient remained in the hospital 2 weeks, during which time her general condition improved to a fair degree. It was decided that the diagnosis of exophthalmic goiter was not definite, and she was discharged to the Outpatient Department for further observation.

Three weeks later the patient was readmitted to the hospital with a flareup of her old symptoms. The pulse rate now reached 130, the exophthalmos was prominent, and lid lag was easily discernible. There was a coarse tremor of the hands, but the patient complained only of feeling a little warm. A basal metabolic rate the day after admission was plus 44 per cent, and the blood cholesterol was 138 mg. per 100 c.c. of blood. It was decided that this was a case of exophthalmic goiter, and as preoperative medication thiouracil was used in the dosage of 0.6 gram daily in 3 divided doses. After 4 days on thiouracil the basal metabolic rate was plus 28 per cent. The clinical course was uneventful until the eleventh day of thiouracil therapy, when the temperature rose to 101°F. The temperature dropped to normal the next day but rose to 103°F. on the fourteenth day. On the fifteenth day of thiouracil therapy the temperature rose to 105°F. and marked symptoms of nervous origin appeared to such an extent that the patient was almost uncontrollable. The drug was discontinued, and within 24 hours the temperature was normal and the patient calm. During the earlier stage of therapy the symptoms of thyrotoxicosis diminished, and a good therapeutic result was gotten from the drug, but the severe pyrogenic reaction in the later stage made continuance of the drug impossible. After 4 days of normal temperature a second attempt was made to administer the drug, and a single dose of 0.2 gram was given. Within 2 hours the temperature rose to 102°F. and 3 hours later to 105°F. The patient complained of epigastric distress, low back pain and pain in the eyes. The conjunctivae became injected and tearing was profuse. Nervous symptoms were not as marked as formerly. In 8 hours the temperature had dropped to 100°F. and the patient's subjective complaints had largely disappeared. The next day the temperature was normal and the patient was feeling well. Subsequent to this at 7-day intervals 2 more attempts were made to administer thiouracil, but each time the identical symptom complex appeared. Single doses of 0.2 gram were used and each time within 2 or 3 hours the temperature rose to 103°F., epigastric discomfort and back pain appeared, and the eyes became suffused. The reaction never lasted more than 10 hours and on the following day the patient always felt well. Blood and urine examinations following these reactions never showed any abnormalities.

Due to the severe pyrogenic reactions thiouracil was discontinued entirely and the patient was put on Lugol's iodine solution for preoperative medication. After 15 days on Lugol's solution a subtotal thyroidectomy was done, and the patient had an uneventful postoperative course. Microscopic examination of the gland after operation showed a hyperplastic gland undergoing regression.

Twelve days after operation the patient was given a single dose of 0.2 gram of thiouracil to determine if drug allergy persisted. A typical reaction occurred but was delayed, not appearing until 7 hours after administration. Subsequently a skin patch test with thiouracil was done which was negative. The patient was discharged from the hospital on the fourteenth postoperative day in good condition.

Discussion

Although little is known concerning drug allergy, it seems to us that the pyrogenic reaction to the administration of thiouracil in this case may rightly be called such. Tuft[5] explains that drug allergy or idiosyncrasy refers to a condition of hypersensitivity in which the administration of a medicinal substance in a quantity nontoxic for the average individual is followed by an unusual but characteristic reaction. This type of reaction is distinguished from that due to the toxic action of the drug by the fact that the latter produces symptoms which are an exaggeration of its physiologic action. To this type of reaction resulting from the administration of ordinary doses of drugs is applied the term drug intolerance. The toxic effects of drugs are much different from those effects produced in persons allergic to them. Although allergic drug reactions may show a great variety of forms, none of these is characteristic of any drug or class of drugs as is the case with drug intolerance with rare exceptions. The peculiar action of any drug in an allergic patient is not the result of its toxic action but is due to an entirely different mechanism, which is identical, however, for all drug allergies. Drug allergy is specific in most individuals in that it exists to only one substance or chemical group; if an individual is allergic to multiple drugs, the allergy to each is specific.

Drug allergy is (1) natural, hereditary or atopic, or (2) acquired, induced or artificial. The atopic type is less common and occurs with the first contact with the tissues of an individual who had not previously had any known contact. In the acquired type the symptoms develop after an interval or incubation period; or after repeated contacts sensitization occurs. Symptoms of the acquired type are fever, skin eruptions, facial edema, arthritic or muscular pains, swelling of the lymph nodes, leukopenia and agranulocytosis. Skin tests are of little or no value. Serum antibodies cannot be demonstrated with the exception of those developed against insulin and pituitary substance. Desensitization is usually unsuccessful.

The mechanism of drug allergy is unknown. The theory of Wolff-Eisner is that the drug combines with body protein and so acts as an antigen.

In the case of our patient the drug was used for 11 days before the febrile reaction developed. Upon withdrawal of the drug the fever speedily subsided. Thereafter, however, the administration of the average single dose was followed almost immediately by a febrile response. Following operation this response was slower, an alteration that may have resulted from the cessation of the state of hyperthyroidism.

The incidence of this reaction to thiouracil is not known, of course. It is not serious but if of frequent occurrence it will interfere with the usefulness of this new drug.

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President's Page

BY WAY OF EXPLANATION

When I was elected President-elect of our Society, I had no idea that my wish to be commissioned in the Medical Corps of the United States Army would be gratified. Upon learning that my services were needed, I was concerned lest I had done an injustice to the Society. At first I thought that the war might terminate before I would be called upon to take over the reins as President. Later I realized that this was not probable and at a meeting of the Executive Board some months ago, I informed the Board that in fairness to the Society, I wished to resign. The Board unanimously rejected the idea and urged me to continue as they felt it proper in the midst of the war that a physician in uniform be President. I deeply appreciated the spirit which prompted the Board and concluded that I should acquiesce to their wishes. The Society can be sure that within the limits imposed upon me because of my military assignment, I will render the best service of which I am capable.

The Society is exceedingly fortunate in having as its First Vice President this year Dr. William M. Ballinger. He will "carry the ball" most of the time and will do it with credit to the Society and himself. So despite my absences—and I assure you I will be with you whenever possible—I feel certain that this will be a good year.

You can count on my talking to you on this page monthly throughout my term of office. That will be one way we can get together regularly.

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A PREVIEW OF POSTWAR MEDICINE

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Note the dates on your calendar!

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LT. COLONEL JAMES N. GREEAR, JR., M.C., A.U.S.
President, The Medical Society of the District of Columbia, 1944–1945

Editorials

LT. COLONEL JAMES N. GREEAR, JR., M.C., A.U.S.

Like many of his colleagues in Washington, Lt. Colonel James N. Greear, Jr., M.C., A.U.S., 78th President of The Medical Society of the District of Columbia, is a Virginian. He is also the son of a physician, Dr. James N. Greear, a graduate in medicine at the University of Virginia in 1883 who practiced in Southwestern Virginia for 58 years.

Colonel Greear was born in Wise County, Virginia, on January 29, 1895. He attended public schools at Saint Paul, Virginia, and Episcopal High School, Alexandria. Entering the University of Virginia in 1914, he graduated with the degree of Doctor of Medicine in June 1920. During World War I he was a private in the Student Army Training Corps assigned to duty at the University. He served internships and residencies at the University of Virginia Hospital from 1920 to 1921, the Episcopal Eye, Ear and Throat Hospital at Washington, D.C., from 1921 to 1922, and the Manhattan Eye, Ear and Throat Hospital, New York City, from 1922 to 1923.

Coloner Greear had been engaged in the practice of ophthalmology in Washington, D.C., from October 1923 until he entered the Medical Corps of the United States Army on September 1, 1943. He is now Chief of the Eye Service at Valley Forge General Hospital, Phoenixville, Pennsylvania. This hospital has been designated as the eye center for the Eastern half of the United States and the European and African theaters of operation. It is also the center for the medical treatment of blind casualties from these theaters.

During his years of practice he has been actively engaged in educational work. He was Associate in Ophthalmology at Georgetown University School of Medicine from 1925 to 1928 and Professor of Ophthalmology from 1929 to 1940. He has also been the author of many scientific papers which have appeared in various medical journals. Among them have been the following: "Miliary Tuberculosis of the Choroid," "Melanosarcoma of the Choroid," "Amaurotic Family Idiosyncrasy in a Child of Non-Jewish Parentage," "Fundus Changes in Arterial Hypertension—A Comparative Ophthalmoscopic and Pathologic Study," "Pits or Crater-like Holes in the Optic Disc" and "Rupture of the Circle of Willis with Intraocular Hemorrhage."

Colonel Greear was married to Miss Mary Alese Schaaff of Washington, D. C. on June 11, 1927. The Greears have two daughters and a son, Mary Alese, 16, James N. III, 14, and Betsy Gene, 12.

This brief biographical sketch tells only a part of the story of a most successful medical career. Jim, as he is known to his intimates, is not only a very able practitioner but one whose integrity can never be questioned. In addition he has a very pleasing personality which attracts men to him. Everyone likes Jim.

As for his hobbies, Jim likes to hunt and is a good shot. He is an expert horseman.

Of necessity, his Society activities will be limited as long as he is with the armed forces. When he is not able to be present at meetings his duties will be taken over by the First Vice President, Dr. William M. Ballinger, in whom the Society can have the greatest confidence. Despite the fact that Colonel Greear will be absent on many occasions, his influence will be felt, and even at long range he will be the guiding spirit of the Society.

EXPERT TESTIMONY

A recent criminal trial in the District Court has called attention again to a perennial problem, that of expert medical testimony.

In a criminal case the emotions of the public may run high, sides are taken, and there is a demand for vengeance by some, while others urge acquittal. In short, the trial, instead of a forum for the search for truth, becomes an arena in which the prosecutor and defense do battle, and anyone who appears as a witness is looked upon as a partisan, whatever his intentions or motives.

The lot of the medical man, particularly if he be called upon to give an opinion concerning the defendant's "sanity," a medically unrealistic concept, defined by wholly unpsychological standards laid down by legal philosophers a hundred years ago, is not a happy one. Even if he has made an examination of the defendant (and the jail or courtroom is hardly comparable with the hospital or office), he is subjected to various hypothetical questions, which, like as not, merely befuddle the jury. Further, the fact that he is produced by one side or the other makes his testimony suspect as presumably biased. It is, of course, axiomatic that a lawyer will not knowingly call an expert whose opinion is greatly at variance with the former's theory of the case.

The Commissioners on Uniform State Laws proposed a bill about 1937, which, although a substantial advance, has not yet been adopted in toto in any jurisdiction. If the law lags in expecting progress, however, the medical profession at least have it in their power to bring about improvement by voluntary action. Consideration might well be given to a policy under which no psychiatrist would agree to act as expert unless it were stipulated that his examination should be made jointly with the other experts employed by both parties, and that a joint report should be submitted. In this manner the testimony would deal with the same facts and much would be accomplished toward eliminating the appearance (perhaps the fact) of bias. The expert, at least, should do his part, despite any examples which may be set him, in seeking to learn and present the truth as clearly and impartially as human emotional attitudes will permit.

W. O.

PSYCHOSOMATIC MEDICINE

Psychosomatic medicine is that "new branch" of medicine which has been an integral part of medical science since the days of Hippocrates. Interest in some subject, be it medical, political, sociologic or what not, is probably most often awakened or reawakened by a thought-stimulating, "catchy" phrase or word. Such is the case with "psychosomatic." It presupposes that we doctors are always aware of the close relation between the activities of the psyche and the functions of human parts, individually and collectively.

In diagnosing symptoms, there must be recognition of the interplay of the mental and physical forces. To neglect an evaluation of this interplay is to give the patient a less satisfactory explanation for his difficulties. This obviously does not mean lightly turning away patients without thorough and complete physical and laboratory examinations. No greater mistake could be made than to deny a patient "the laying on of hands." Nor does it mean to study the heart, the stomach, the brain, the skin, and so on as purely a mass of specialized tissue, unique in its aberration from the normal and totally divorced from the other parts and from the psyche. The concept of psychosomatic, in the very structure of the term, joins the psyche and the soma into an "unbreakable crystal" to focus the physician's attention.

There is no short cut in reaching an understanding of how much emotion colors or produces symptoms, or to what degree organic disease provokes emotional fixation. At times long hours need be spent in reaching this understanding. In many instances the kaleidoscope of emotional patterns will tax even the most astute psychiatrist, but the family doctor still will be called upon to at least recognize the kaleidoscope. In most cases this same family doctor will recognize and adequately treat the psyche and the soma. He will do so better if his training has instilled at least a few basic concepts of psychosomatics. Since, as Dr. Edward Weiss told his Washington listeners recently, psychosomatics can be taught, the earlier such teaching is presented in a medical career the better.

We hear all too often from physicians the expression, "Oh he is just a psychoneurotic and therefore a nuisance." The tone of such a statement is usually that of disgust, or intolerance. This is an unfortunate state of affairs. The patient has placed his trust and, in fact, his entire being in the physician's hands. To turn aside this trust intolerantly, on occasion, may produce serious consequences. Suicide and at times homicides follow in the wake of a physician's lack of recognition and appreciation of emotional conflicts, particularly when the complex takes expression in somatic symptoms.

Would it not be possible, therefore, for us as physicians to aid our patients more fully by employing a psychosomatic approach? Let us not be all "psyche minded," nor all "soma minded," but let us rather apply the principles of both concepts for the greater improvement of our patients and ourselves. The Committee on Post Graduate Education of the Medical Society has lighted the way. The recent series of four lectures should be the beginning of endeavor directed toward making psyche and soma an unhyphenated word, psychosomatic.

Robert H. Groh, M.D.

REVISION OF THE NATIONAL FORMULARY

Deletion of nearly a third of the drugs in the National Formulary and acceptance of about 115 new monographs were among the extensive changes approved by the Committee on National Formulary at its three-day session held recently at the American Institute of Pharmacy, Washington, D. C. Developmental work on N. F. VIII is now under way, and the new edition is expected to be on the pharmacist's reference shelf by the end of 1945.

The use of English instead of Latin for primary drug titles was one of the basic changes of policy authorized. This action, which overthrows a long-standing tradition in pharmaceutical compendia, was taken as a step toward greater rationality in drug nomenclature and, in the opinion of the Committee, is in conformity with the trend of modern medical science and prescribing. Latin will be retained as the secondary title, appearing in smaller type and occupying the place of present English titles. The composition and nature of N. F. drugs will be indicated in the titles to the greatest extent possible. Drugs dispensed under N. F. synonyms must also meet the official standards.

Metric doses will be given greater emphasis in the new N. F. Consideration was given to a proposal to drop apothecaries' doses completely, but the Committee felt that the steady trend toward the use of the metric system had not yet reached the point where apothecaries' doses could be safely omitted from the monographs.

Discussion later centered on enteric coated medications, since some of those now being dispensed do not dissolve in the intestinal tract.

Apparently standards will not be developed in time to include enteric coatings in the forthcoming revision but the Subcommittee on Solid Preparations for Internal Use is at work on the project.

Extension of another basic policy of the Committee will make N. F. VIII more self-contained, thus obviating the necessity of looking up information in the Pharmacopoeia in connection with N. F. procedures.

Changes in formulas brought about by the exigencies of war will not be included in the regular revision. Instead they will be maintained on a temporary basis in a special supplement to be issued concurrently with N. F. VIII.

Recognizing the value of official standards to the practicing pharmacist as a means of providing dependable drugs and useful dispensing information, the Committee on National Formulary, composed of representatives of the Nation's pharmacists, is inviting each state pharmaceutical association and individual pharmacists to participate in the revision work in an advisory capacity.

In and Out of Focus

BY THE OBSERVER

Short Vacations Prescribed Few physicians write in a clear and interesting fashion. This is due to the fact that effective writing requires aptitude plus a great deal of hard work. And not many will devote the time needed to acquire skill in the use of the written word.

A well known and able medical journalist has often deplored the literary inadequacy of the editorial pages of medical journals. He is undoubtedly right. But there are those who do write well. Your Observer was highly pleased the other day when he ran across an editorial entitled "Short Vacations" in the May number of the *Bulletin of the Medical Society of the County of Kings* (New York). Though "light" in a sense, the subject matter was in his opinion timely and imaginatively written.

With no further preliminaries, here it is:

"The life of the successful physician is trying on his nervous system at all times, and especially is this true at the present time with all its vexing problems.

"The human body can endure only a certain amount of physical pressure and mental strain before it begins to 'crack,' to use a favorite expression.

"The only medical barometer a physician can apply to himself is the one which tells him that he is getting jittery, his work seems like a mountain on his back, and he scolds and scowls at patients and family alike. This is the signal light to stop, look and listen and to get away for a rest.

"Some of us think this is the 'bunk.' 'It can't happen here!' Then in walks 'Mr. Coronary Thrombosis' and flattens Mr. M. D. for a long rest.

"Another signal is the boredom which overtakes one's soul, and the inability to put things over, whether they be in his profession or his social life.

"We have all seen examples of Doctor Wise Owl, who grows haggard, worn out and seems to lose his old grip, argues with his family and friends and always seems to be doing and saying the wrong thing.

"A rest need not mean a long, tedious journey, but it does mean to close up shop and get away from medicine.

"Have you ever taken a trip through your own city and seen what has taken place while you had your nose to the grindstone?

"Did you ever see any of the wonderful new ways the people around you are doing things to make your life happier?

"Why not go to the circus? None of us are too old to give the old elephant peanuts and watch the glitter and tinsel of make-believe land.

"How about a walk in the park? Have you noticed the people passing by. The young boy on his skates always is going somewhere in a terrific hurry—the brisk steps of the young business man—the dignified steps of the banker, and perhaps on the next bench, the derelict. How you can ponder on his case. Here indeed is a problem for you while the birds sing you a song and the children laugh and play.

"Perhaps you will just daydream and go back over the years until you stop and think of the time when becoming a physician seems like a faraway vision. What castles we built. The tired physician of fifty has attained all his castles, and has done more than he ever could have dreamed of doing in that far-distant day of long ago.

"So when the jinx of gloom and tiredness comes poking around the door, just shut him out, run away and [take] a short vacation."

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National Health Program Urged The President and the Secretary of the Medical Society of the District of Columbia were among those invited to a meeting of the Council on Medical Service and Public Relations of the American Medical Association at the Mayflower Hotel, Washington, on May 22. They, like other guests of the Council, were asked to present their views on the medical situation.

Speaking for the District Society, President Sanderson said:

"It is our feeling that the American Medical Association, splendid though its record has been, is looked upon by many people with whom we speak in Washington as an 'anti' group. In other words, that the Association is seldom *for* but usually *against* any new proposal. Of course, we know that it is not the wish of organized medicine to appear in this light, nor has its opposition been due to selfish motives as is frequently charged by many persons unsympathetic if not antagonistic to the A.M.A. The fact remains, however, that many people here who should be our friends are not. Somehow we must win their support.

"It is imperative in our opinion that the A.M.A. present to the country its conception of a national health program. It has been said a number of times by officials of the Association that no health program can be devised which is adaptable to all communities. This is undoubtedly true but it is equally true that the underlying principles of all health programs are the same. It is our conviction therefore that the A.M.A. is obligated to actively encourage and assist state and county medical societies in the development and operation of adequate, inclusive health programs.

"Our impression is that the Association takes the position that it should keep hands off state and county society affairs. As regards a number of matters this is proper, but where a problem of such scope as the health of the Nation is concerned, it is not desirable.

"We feel that the House of Delegates might well entrust to this Council the development of a national health program. The program of itself need not be startlingly new but it should be forward-looking. Such a move would place the Association before the country in a positive role rather than a negative one."

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Michigan Medical Service The most successful experiment in prepaid medicine sponsored by a medical organization, the Michigan Medical Service, according to recent reports, is for the first time "in the black." The Service has a turbulent history. At one time its existence was seriously threatened because of financial difficulties. The Commissioner of Insurance of Michigan debated whether or not to close the Service. Interestingly enough, labor leaders intervened and urged that it be permitted to continue operation, being confident of its eventual success.

In the midst of its difficulties, Mr. Jay C. Ketchum was appointed Director. He and his able assistants battled against heavy odds to place the Service on a sound basis. Faced with a deficit of several hundred thousand dollars only two years ago, the financial recovery of the Service is a tribute to the executive ability of Mr. Ketchum, who is a most realistic individual. He has no illusions about the job ahead. He readily admits there are many difficult problems to be solved. He foresees in particular several knotty ones in the postwar era. Nevertheless he is confident that they can be satisfactorily met.

There is no easy road to the successful operation of a medical service plan. To begin with, it is, as Mr. Ketchum says, a selling job. People are not demanding the protection such a plan affords. However, there is a need for it and so potential subscribers must be "sold." Difficult though this is, Mr. Ketchum has found it the least of his worries.

A majority of the physicians in Michigan have been coöperative. There are a substantial minority who are not. They are the ones who have read little about the Service, know little about its operation, and are not particularly interested in it. This group is a matter of concern and much effort has been put forth "educating" them.

The Committee on Medical Care of our Society has, through its Chairman and Secretary, learned a great deal from the Michigan experiment. It should make the road easier in Washington.

★

Where Medical Schools Fail

Your Observer does not pretend to be an authority on medical education. So far as he is concerned, medical schools are doing a splendid job except for one thing. They do not teach students who plan to enter private practice how to establish and conduct such a practice. This is far more important than medical educators realize. One can imagine, for example, what might happen if a promising young man, taught the theory and some of the practical aspects of navigation but who had received no instruction in handling personnel, was given command of a ship. His chances of making good would depend not only upon his ability but to a far greater degree upon good luck. He would very likely have many unpleasant experiences which could have been obviated had his training been complete.

And so it is with the young doctor. He is well trained scientifically and provided with opportunities to gain practical experience in the treatment of patients, but in most medical schools today he learns little about matters of non-scientific nature which will confront him daily when he opens his office.

What then are some of the things he should be taught? He should be told about the importance of selecting the "right" community in which to practice, the choice of an office which meets his needs and how to conduct it efficiently with special regard for the welfare of his patients. He should be taught how to handle his business affairs intelligently. It is exceedingly important that he know a little about the law as it pertains to medicine. Medical ethics should be presented to him with special reference to their application in every-day practice. He should be made familiar with social trends and his responsibilities in regard to them.

Now it is possible for the neophyte to learn much of this from experience, but to say the least, this is the hard way and in the opinion of your Observer cannot be justified. Many young physicians make serious mistakes without realizing it. They resort to commercial methods that antagonize their patients and colleagues. They inadvertently become entangled in legal difficulties. Their personal business affairs are often chaotic. Their opinions on the social and economic phases of medicine are too frequently based on prejudice rather than knowledge.

So it is your Observer's belief that medical schools will not have fulfilled their obligations to their students until they include in their curricula adequate training of a non-scientific nature which will fit them more adequately for the society they serve.

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The Attitude of the C.I.O.

Whatever the reasons, and apparently there are many, the national leaders of the Congress of Industrial Organizations have an antipathy for the American Medical Association, and for that matter, for medical societies in general. Although they themselves are frankly organized to better their own lot, they are chary about extending this privilege to other groups—specifically to organized medicine.

Your Observer was privileged recently to listen to arguments advanced by a C.I.O. spokesman in favor of the Wagner-Murray-Dingell Bill. The speaker obviously knew little about doctors or the practice of medicine but his ignorance in such matters troubled him not at all. All that concerned him was that the workers whom he represented should receive medical care largely at Government expense. It apparently did not occur to him, if he gave it a thought, that the medical profession, like labor, must work under satisfying conditions if they are to render good service, and that a dissatisfied or an overworked medical profession cannot do its best work. Under the program which he espoused, more medical care would be made available, but its quality would be doubtful.

The C.I.O., like other groups who see eye to eye with them, will learn, if a Government system of medicine should be instituted in this country, that there is no such thing as cheap good medical care. It will always be costly and someone must foot the bill. Certain labor leaders may count on the taxpayers in the higher income brackets doing so. Any such idea, in view of the already high taxes, is an illusion. The facts are that whether they are paid in the form of taxes or by individual voluntary contributions, the money will come out of the pockets of the ordinary citizen.

It is safe to say that physicians are convinced that changes in medical practice are necessary. A majority of them also believe that when such changes occur they must be made primarily with the welfare of the people in mind. This is no platitude to obscure selfish purposes of physicians, for doctors are demonstrating not only by word but by deed that they consider unmet health needs their responsibility. Evidence of this is the fact that medical societies throughout the country are seeking and some have found better methods of providing medical care.

Your Observer would be the last to say that medical organizations are infallible. This is equally true of the C.I.O., which has wielded tremendous power in recent years and not always altruistically.

But recriminations do no good. Labor and medicine must find a way to work together if a satisfactory health program is to be evolved. This cannot be accomplished if the C.I.O. leaders attempt to dictate the terms under which doctors shall work. Each must show respect for the other's point of view.

★

Aid for Young Physicians Recently a Commander in the United States Navy and an Active Member of the Society dropped in to see your Observer. An hour or so was whiled away in discussion, the Commander talking enthusiastically of his experiences. Just before he left he said he had thought a great deal about the future of medical practice and had some suggestions to offer which he hoped the medical profession would consider. He thought of requesting the Medical Society to relay them to the A.M.A.

Perhaps most of the thousands of young physicians who entered the armed forces immediately following their internships will eventually return to civil life. He believed that as part of their training following the war they should be given an opportunity to engage in private practice in communities, particularly in rural areas, not having an adequate number of physicians. He proposed that a list of such communities be compiled from which the young physicians could make their selection. He suggested that they be permitted to practice in these locations without a license for a period of one year during which they would be subsidized by the Government.

The Commander's ideas are well worth considering, for such a plan would give older physicians returning from services time in which to reëstablish themselves. It will be difficult enough for them at best, and it is certain that their younger colleagues will not begrudge them a "break." The youngsters themselves would not lose under such an arrangement. On the

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THE DISTRICT OF COLUMBIA TUBERCULOSIS ASSOCIATION

Clayton B. Ethridge, M.D., F.A.C.P.

Chairman, Subcommittee on Tuberculosis, The Medical Society of the District of Columbia

The complexities of the measures required for the control of tuberculosis in any large community derive from the unique characteristics of the disease itself, in particular, its usually insidious onset, its chronic relapsing tendencies, its direct contact communicability, and its attendant relative frequency. Experience has now fully demonstrated that an effective program for controlling this infection must embrace various medical and other aspects, including: (1) provisions for proper education of the general public; (2) efficient measures for detecting the disease in its early stages; (3) the sanatorial isolation and care of active cases; (4) facilities for vocational training and diversional activities during the protracted hospitalization of patients; and (5) long-lasting supervision of arrested cases designed to effect their full physical and economic rehabilitation. Mindful of these requirements as they relate to Washington, the Medical Society last November, at the suggestion of its Subcommittee on Tuberculosis, endorsed the annual Christmas Seal Sale of the District of Columbia Tuberculosis Association and recommended that physicians contribute to and actively support the work of this voluntary health agency. It seems proper, therefore, to report at this time on some of the activities whereby the District of Columbia Tuberculosis Association is coöperating with the medical profession and the District of Columbia Health Department in carrying forward an effective program for the control of tuberculosis in this area.

A traditional and fundamental interest of voluntary tuberculosis associations relates to the proper education of the public with regard to tuberculosis and its control. The District of Columbia Tuberculosis Association has actively continued its work in this field, and has recently increased the scope and intensity of its educational program. Utilizing the help of national authorities and local physicians, suitable material on tuberculosis is continually being prepared and presented to the general public and to teachers, students, nurses, patients and lay groups through the media of the press, radio, motion pictures, lectures, pamphlets, posters and exhibits. A lively bi-monthly publication entitled *Control* is now being published by the Association for general distribution. Each issue of this publication reaches large numbers of individuals in various walks of life and carries timely items of local or national interest relating to tuberculosis. In the field of education for patients, the Association recently organized a series of talks and motion-picture presentations designed to inform hospitalized patients regarding the nature of their disease and to familiarize them with the sources and kinds of services available to assist in their ultimate rehabilitation. This educational series is now being presented to the patients at Glenn Dale Sanatorium. For the particular use of physicians, the Association has on hand copies of several booklets dealing with certain clinical aspects of tuberculosis, written by recognized authorities. It has, also, an approved manual of information for patients and several supplementary items, whereby a physician's instructions to his tuberculous patients may be complemented and reinforced. Sanatoria in the District of Columbia are now making considerable use of the manual of information for patients. Physicians who so desire may obtain copies of these several publications, without cost, by directing a written or telephoned request to the Association's offices, 1601 Eighteenth Street, N. W., Adams 7100.

During the past six months the District of Columbia Tuberculosis Association has collaborated with the Bureau for Tuberculosis of the District of Columbia Health Department by organizing, on a voluntary community basis, mass chest X-ray surveys in two local census tracts containing large negro populations. These surveys have yielded a number of active cases of tuberculosis, the detection of which would otherwise have been delayed. Moreover, from these surveys a fund of information and experience was derived whereby the promotion of future surveys of similar character may be carried out using improved technics.

The Tuberculosis Association, the District of Columbia Health Department, and the United States Public Health Service are now engaged in a study to develop simplified methods for recording significant information on patients with tuberculosis and their contacts. A recording system of this character will contribute to the better handling of individual cases of tuberculosis, and will permit more accurate statistics to be derived regarding local problems in tuberculosis control. This study is being thoroughly pursued and when completed will provide, it is hoped, a model method for keeping accurate information of this character on a current basis. As a part of this project local physicians have already been requested to furnish the Bureau for Tuberculosis with current information regarding all cases of tuberculosis under their care.

In coöperation with the American Legion, the Association has initiated efforts to stem the discharges of patients with active tuberculosis from Veterans Administration facilities.

The Association has also set up a department of research and exhibits, the purpose of which is to assemble for publication, in coöperation with the District of Columbia Health Department, factual information regarding the current status of tuberculosis control in Washington.

At the request of the District of Columbia Health Department, the Tuberculosis Association recently undertook a comprehensive survey of patients with tuberculosis in all District sanatoria. In this study, it was found that of 778 patients interviewed 451 (58 per cent) had far advanced disease, 230 (30 per cent) had moderately advanced disease, 79 (10 per cent) had minimal tuberculous lesions, and 18 (2 per cent) had conditions other than pulmonary tuberculosis. Of the total of 778 patients included in the survey, 471 (61 per cent) had a fair or better prognosis, in the opinion of the physicians in attendance. These findings reveal the large proportion of patients with advanced tuberculosis now in the various District of Columbia sanatoria. They make strikingly apparent the need for intensified efforts to detect and treat tuberculosis in its early stages, by chest X-ray surveys of suitable groups, by repeated examinations of contacts to known cases, by effective treatment of minimal lesions, and by all other available means.

The findings revealed by the above mentioned survey also emphasize the necessity for coördinating medical care and of provisions for rehabilitation during the period of hospital residence of tuberculous patients. A program for this purpose must be supplementary to and in close harmony with the strictly medical aspects of care, and must provide diversional activities (such as library services, occupational therapy, etc.) which encourage the tuberculous patient to remain hospitalized for a sufficiently long interval to effect a proper arrest of his disease. Of equal or greater importance in certain instances, such a program must provide facilities which permit selected patients during the days of their cure to pursue suitable educational or training courses designed to promote their economic rehabilitation. With the approval of the Health Officer, the District of Columbia Tuberculosis Association is now employing the full-time services of two trained individuals, and within the near future will employ the full-time services of a third trained individual, to develop and carry out in coöperation with the medical authorities an efficient program of diversional activities and vocational training. In this way coördinated programs for medical care and rehabilitation will soon be in operation in all District of Columbia sanatoria.

(*Continued on page 281*)

On The Home Front

The Ninety-fourth Annual Session of the American Medical Association, held June 12–16, in Chicago, was attended by 56 members of the Medical Society of the District of Columbia.

Dr. Herman L. Kretschmer, of Chicago, took office as the new President. **Dr. Roger Irving Lee,** of Boston, President-elect, will take office July 1, 1945.

Dr. George Dock, internist and pathologist of Los Angeles, was awarded the Distinguished Service Medal by the House of Delegates, June 12. He is widely known for his work on the pathology of malaria and dysentery, protozoan diseases of the blood, pernicious anemia, the ductless glands and hookworm.

At the War Meeting, Wednesday evening, June 14, addresses were delivered by Major General Norman T. Kirk, Vice Admiral Ross T. McIntire, Surgeon General Thomas Parran, Air Surgeon David N. W. Grant, Lt. General Robert Kho-Sheng Lim of the Chinese Army, Major General G. B. Chisholm, Director General of the Medical Services, Royal Canadian Army, and Professor Vladimir Lebedenko, representative in the United States of the Mission of Alliance of Red Cross and Red Crescent Societies of Russia.

Several members of the Medical Society of the District of Columbia appeared on the scientific program. **Colonel Leonard G. Rowntree, M.C., U.S.A.,** read a paper on "The Health Needs of the Nation as Reflected by the Examination of Thirteen Million Registrants" before the Section on Practice of Medicine. In a Symposium on the Treatment of Cancer of the Prostate Gland presented by the Section on Urology, **Dr. William P. Herbst** discussed "Effects of Biochemical Therapeusis in Cancer of the Prostate Gland: Further Observation." **Dr. William Earl Clark** addressed the Section on Miscellaneous Topics on the subject, "Gastrointestinal Conditions Simulating or Aggravating Cardiovascular Diseases."

CALENDAR OF MEETINGS

June 7	Subcommittee on Prepaid Medicine
June 9	Subcommittee on Program, Annual Scientific Assembly
June 26	Executive Board
June 27	Grievance Committee
June 28	Subcommittee on Program, A.S.A.
June 29	Section on Pathology and Laboratory Medicine

The District Medical Society was also well represented in the Scientific Exhibit. **Drs. Charles Stanley White, Jacob J. Weinstein and J. Lloyd Collins** received a Certificate of Merit for their exhibit on "Protein Metabolism and the Use of Protein Digest in Surgery; Preparation of Plasma by Sedimentation by a New Method." In the section devoted to Tropical Medicine was **Dr. Eugene R. Whitmore's** exhibit on "Parasitology and Tropical Diseases." **Drs. J. Ross Veal and Hugh H. Hussey** collaborated in a visual presentation of "Surgery of Thrombosis of Peripheral Veins," while **Dr. A. R. Abarbanel and Comdr. Howard F. Kane, M.C., U.S.N.R.,** presented an exhibit jointly on "Pharmacodynamic Studies of the Human Gravid Uterus by Means of External Hysterography."

The Section on Pediatrics, in coöperation with the Rheumatic Fever Committee of the American Academy of Pediatrics, held informal clinical conferences on rheumatic fever. One of the discussion leaders was **Dr. Bernard J. Walsh.**

The American College of Chest Physicians held its annual meeting at the Stevens Hotel, Chicago, June 10–12. **Dr. J. Winthrop Peabody,** who retired as President of the College, addressed the assembly. **Dr. Herman E. Hilleboe** also appeared on the program.

Dr. J. Arthur Meyers, Professor of Medicine, University of Minnesota, succeeds Dr. Peabody as President. **Major General Shelley U. Marietta,** Commanding Officer of the Walter Reed General

Hospital and the Army Medical School, Washington, D. C., was elected Second Vice President of the College. **Dr. William D. Tewksbury** was reëlected Governor for a term of three years.

The Forty-fifth Annual Meeting of the American Therapeutic Society was held June 10, 1944, at the Stevens Hotel, Chicago. **Dr. Oscar B. Hunter** gave his Secretary's Report during the business meeting. **Dr. Arnold McNitt** participated in the scientific session, presenting a paper on "Hypertensive Encephalopathy—A Clinical Consideration."

The third edition of the **Directory of Medical Specialists** listing names and biographic data of all persons certified by the fifteen American Boards is to be published early in 1945. Diplomates are requested to forward their biographies as soon as possible after receiving the proper forms from the publication office.

The American Board of Ophthalmology announces the removal of its Executive Office to Cape Cottage, Maine. Application blanks for the 1945 examinations are now available. Examinations will be held in several cities, including New York City (June, 1945), with exact dates to be announced about January 1. The deadline for applications for this examination is December 1, 1944.

At its meeting May 29, the **Section on Pathology and Laboratory Medicine** reëlected the following officers for 1944–45:

Dr. Oscar B. Hunter, *Chairman*; Dr. Tomas Cajigas, *Vice Chairman*; Dr. Lester Neuman, *Secretary-Treasurer.*

Dr. Hunter was named local representative of the American Society of Clinical Pathologists.

The Commission on Licensure for the District of Columbia has notified all physicians who have failed to register for 1944 that should they continue to practice medicine in the District of Columbia they will be considered as practicing without a license and penalized as provided by law. Special provisions have been made for physicians in the armed forces who are away from Washington, and they will not be penalized. However, the Commission warns the others that their delinquency will be called to the attention of the proper authorities.

Dr. George C. Ruhland, Secretary-Treasurer of the Commission, has asked the Medical Society of the District of Columbia to notify all physicians with whom they come in contact to register promptly if they have not already done so.

The Louis Mackall Medical Society held its May meeting at the Kennedy-Warren. Lt. Colonel S. Ross Taggart, M.C., A.U.S., was the speaker.

The following officers were elected to serve for the coming year:

Dr. Russell J. Jansen, *President*; Dr. Edgar E. Quayle *Vice President*; Dr. Wyrth Post Baker, *Secretary-Treasurer.*

Dr. Ray Lyman Wilbur, Chairman of the Baruch Committee on Physical Medicine, and **Dr. Frank H. Krusen,** Director, have announced the names of 19 scientists who will act on the organization's **Scientific Advisory Committee and the Committee on War and Postwar Physical Rehabilitation and Reconditioning.** Dr. Ernest J. Jaqua of Eugene, Oregon, former President of Scripps College, will be Educational Director. The purpose of the Committee, which was given $1,100,000 by Bernard M. Baruch, is to study the use of physical procedures and facilities in the care of the sick.

Included among the scientists is Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, Professor of Psychiatry of George Washington University School of Medicine, and Chairman of the Committee on Psychiatry of the National Research Council. Other members of the Scientific Advisory Committee are Dr. Frank H. Krusen, Chairman; Dr. Ernest J. Jaqua, Secretary; Dr. John Stanley Coulter of Northwestern University, Chairman of the Council on Physical Therapy of the American Medical Association; Dr. John Farquhar Fulton of Yale University; Dr. Charles Gordon Heyd of Columbia University; Dr. Andrew C. Ivy of Northwestern University; Dr. Chauncey D. Leake of the University of Texas; Dr. Frank R. Ober of Harvard Medical School; Dr. Francis O. Schmitt of the Massachusetts Institute of Technology, and Dr. Ray Lyman Wilbur, ex officio member.

Members of the Committee on War and Postwar Physical Rehabilitation and Reconditioning are as follows: Dr. Frank H. Krusen, Chairman; Dr. Ernest

J. Jaqua, Secretary; Major Walter E. Barton, M.C., A.U.S., Office of the Surgeon General, War Department; Captain Charles F. Behrens, M.C., U.S.N., Naval Medical Center; Dr. Dean A. Clark, Senior Surgeon (R) U.S.P.H.S., Office of Vocational Rehabilitation, Federal Security Agency; Dr. Charles M. Griffith, Medical Director, U. S. Veterans Administration; Captain Frederick A. Jostes, M.C., U.S.N.R., Bureau of Medicine and Surgery, Navy Department; Captain Howard Montgomery, M.C., U.S.N., Bureau of Medicine and Surgery, Navy Department; Lt. Colonel Howard A. Rusk, M.C., A.U.S., Office of the Air Surgeon, War Department; Mr. H. V. Stirling, Veterans Administration; Lt. Colonel Benjamin A. Strickland, Jr., M.C., U.S.A., Commanding Officer, A.A.F. Regional Station Hospital, Davis-Monthan Field, Tucson, Arizona; Colonel Augustus Thorndike, M.C., A.U.S., Office of the Surgeon General, War Department (on leave of absence from Harvard Medical School), and Dr. William S. Tillett of New York University.

To provide men and women professionally trained in public health to aid in fighting poliomyelitis, the **National Foundation for Infantile Paralysis** has set aside the sum of $50,000 for fellowships in health education. This program has been developed in coöperation with the U. S. Public Health Service. Candidates for health education fellowships will be selected by an advisory committee of the U. S. Public Health Service, and those accepted will be assigned to schools of public health at Yale University, the University of Michigan and the University of North Carolina. Applications may be obtained from the Office of the Surgeon General, U.S.P.H.S., Washington 14, D. C., and must be returned to the Office of the Surgeon General not later than August 15, 1944.

The D. C. Nursing Council for War Service, Inc., 1746 K Street, N.W., desires the assistance of physicians in a recruiting campaign for 400 student nurses. Most of the classes will begin in September. The accredited schools of nursing in the District of Columbia are as follows: Capital City School, Freedmen's Hospital, Garfield Memorial Hospital, Georgetown University School, Lucy Webb Hayes School, Providence Division of Catholic University School and St. Elizabeths Hospital. Appointments for the last named are made through Civil Service. All hospitals are now under the U. S. Cadet Nurse Corps.

First awards of the **United States of America Typhus Commission Medal** were made by Secretary of War Stimson, May 31, to Rear Admiral Charles S. Stephenson, U.S.N., the Commission's first Director; Dr. R. E. Dyer, Assistant Surgeon General of the U. S. Public Health Service; and Brig. General James S. Simmons of the Office of the Secretary of War.

Dr. Roy Lyman Sexton, internist, **Dr. William A. Morgan,** otolaryngologist, and **Dr. R. K. Thompson,** dental surgeon, left July 1 on a two weeks trip to St. Paul and St. George of the Pribilof Island groups, which are situated 250 miles north of Dutch Harbor in the Bering Sea. They will assist in examining 400 Aleut natives repatriated in May after a two-year stay in Southeastern Alaska.

Dr. James A. Gannon has been reëlected a member of the Board of Education for the District of Columbia. On June 21 he presented diplomas to the graduating class of the Coolidge High School.

Dr. J. Winthrop Peabody was elected an Honorary Member of the Sociedad Chilena de Tisologia at a recent meeting in Santiago, Chile. A special Certificate of Honorary Membership has been mailed to Dr. Peabody by Professor H. Orrego Puelma, President of the Society.

Dr. Charles P. Cake, former chief of the tuberculosis division of Gallinger Hospital, left Washington June 28 to become chief of tuberculosis service at the Marine Hospital at Staten Island, New York. He has been commissioned a Senior Surgeon in the United States Public Health Service. Dr. Cake resigned his position at Gallinger Hospital last January after ten years' service but stayed on for several months because of the shortage of staff personnel.

Dr. Arthur C. Christie was recently reëlected by the Medical Society to serve on the Board of Trustees of Group Hospitalization, Inc.

Dr. W. Lawrence Smallwood was installed as President of the District of Columbia Dental Society at its annual meeting June 13 in the Medical Society's auditorium. **Dr. J. Walter Bernhard** is the President-elect. **Dr. Walter A. Rath** was elected a member of the Executive Committee.

Dr. Leigh C. Fairbank, Associate Member of the Society, has served as Chairman of the Dental Division for the Fifth War Loan Drive.

Male volunteer hospital aides are being used to relieve the shortage of personnel in local hospitals. Among the hospitals using male aides are Georgetown, Doctors and Emergency. A Volunteer Office has been set up at 1350 Pennsylvania Ave., N.W., telephone, Republic 5105.

BOOKS RECEIVED FOR REVIEW

Principles and Practices of Inhalational Therapy. Alvan L. Barach, M.D., Associate Professor of Clinical Medicine, Columbia College of Physicians and Surgeons; Assistant Attending Physician, Presbyterian Hospital. Price, $4.00. Pp. 315, with 59 illustrations. Philadelphia: Lippincott, 1944.

The Management of Neurosyphilis. Bernhard Dattner, M.C., Jur. D., Associate Clinical Professor of Neurology, New York University Medical College, with the collaboration of Evan W. Thomas, M.D., Assistant Professor of Medicine and Assistant Professor of Dermatology and Syphilology, New York University Medical College, and Gertrude Wexler, M.D., Instructor in Dermatology and Syphilology, New York University Medical College. Price, $5.50. Pp. 398. New York: Grune & Stratton, 1944.

Practical Malaria Control. A Handbook for Field Workers. Carl E. M. Gunther, B.S., M.D., D.T.M. (Sydney), Field Medical Officer, Bulolo Gold Dredging Limited, Territory of New Guinea, at present with Australian Medical Corps. Price, $2.50. Pp. 91. New York: Philosophical Library, 15 East 40th Street, 1944.

A Hundred Years of Medicine. C. D. Haagensen, M.D., and Wyndham E. B. Lloyd. Price, $3.75. Pp. 443. New York: Sheridan House, 1943.

Fertility in Men. A Clinical Study of the Causes, Diagnosis, and Treatment of Impaired Fertility in Men. Robert Sherman Hotchkiss, B.S., M.D., Lieutenant Commander, (M.C.) U.S.N.R. (on active service); Assistant Professor of Urology, New York University Medical College; Instructor in Surgery (Urology), Cornell Medical College; Assistant Visiting Attending, Department of Urology, Bellevue Hospital; Assistant Visiting Attending in Surgery (Urology), New York Hospital; Chief of Urological Clinic, New York University Medical College Clinic. Price, $3.50. Pp. 216, with 95 illustrations. Philadelphia: Lippincott, 1944.

Artificial Pneumothorax in Pulmonary Tuberculosis Including Its Relationship to the Broader Aspects of Collapse Therapy. T. N. Rafferty, M.D., Phoenix, Ariz., formerly Resident Physician, William H. Maybury Sanatorium (Detroit Muncipal Tuberculosis Sanatorium), Northville, Mich. Price, $4.00. Pp. 192, with 26 illustrations. New York: Grune & Stratton, 1944.

Minor Surgery. Humphry Rolleston and Alan Moncrieff, Editors. Price, $5.00. Pp. 174, with 30 illustrations. New York: Philosophical Library, 15 East 40th Street, 1944.

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BOOK REVIEW

A Hundred Years of Medicine. C. D. Haagensen and Wyndham E. B. Lloyd. Pp. 443. Price, $3.75. New York: Sheridan House, 1943.

The authors of this volume tell us that, in order to avoid confusing the lay reader, they have, as far as possible, omitted technical expressions. They have done something more. By their clearness and conciseness of expression they have made the reading of a more or less technical book a pleasure rather than a task. Indeed, to many who read this book the idea will occur that the authors have consciously or unconsciously taken the writings of the scientist Huxley as their literary model.

The book really constitutes an epitome of medical development, and for that reason it is almost impossible in a short review to describe its contents. The first few chapters are a short history of early medicine and, when we read them, we shudder as we realize the suffering that disease and accident inflicted on our immediate ancestors. It is with relief that we learn, in the following chapters, what patient research has done to protect us from such misery. The short personal descriptions of the men who have brought about these advances in medicine and surgery add a note of human interest that all readers will appreciate.

The last chapter is entitled "The Doctors' Dilemma" and deals with the interrelations of the doctor, the citizens and the state.

B. A. C. C.

REPRINTS RECEIVED

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(*Continued from page 253*)

1. The combating of shock and dehydration with the intravenous administration of large quantities of plasma.
2. The strict sterile technic employed while handling all burns.
3. The employment of thick, bulky pressure dressings infrequently changed.

These promote (a) exclusion of bacterial contamination, (b) rest resulting in lymphostasis, (c) pressure resulting in greatly lessened edema and therefore improved circulation, (d) preservation of viable cells at the root of hair follicles and sweat glands, (e) reduction of pain by exclusion of air and the prevention of infection, (f) absorption and drainage into the dressings which prevents the pooling of serum resulting in infection, and (g) great increase in the ease of nursing care.

(*Continued from page 273*)

contrary they would gain invaluable experience which would stand them in good stead later on.

There are, of course, arguments against this proposal. For instance, objections may be raised to Government subsidy with all its implications. Still and all the Commander's proposal cannot be dismissed lightly.

(*Continued from page 275*)

During recent years Washington has grown into a large metropolitan community. The citizens of Washington have thereby acquired a greater burden of responsibility for the control of tuberculosis in the District of Columbia. Obviously, an effective program for the control of this disease must include the coöperative endeavors of all agencies concerned with the problem, particularly the local Health Department, the individual practicing physicians, and the voluntary tuberculosis association. It is a pleasure to report to the members of the Medical Society that the District of Columbia Tuberculosis Association is actively devoting its efforts toward the accomplishment of desired objectives.

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MEDICAL ANNALS
of the
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VOLUME XIII August, 1944 NUMBER 8

THE RELATIONSHIP OF GERMAN MEASLES DURING PREGNANCY TO CONGENITAL OCULAR DEFECTS *

BENJAMIN RONES, M.D.
Washington

THE purpose of this communication is to bring to the attention of ophthalmologists, obstetricians and pediatricians some rather noteworthy observations emanating from Australia during the past few years. In 1941 Gregg[1] reported a series of 78 cases of congenital cataracts occurring in infants. He noted the startling fact that with few exceptions the mothers gave a history of an exanthematous disease diagnosed as rubella, occurring during the early stages of pregnancy. In 44 of these cases, a congenital heart lesion was also present. Gregg was of the opinion that these cataracts were dissimilar in appearance to any previously reported type of congenital cataract. They were of a dense nuclear type with well marked Y sutures. In 62 cases, the condition was bilateral, and in the remainder unilateral. Of these latter 16 cases, the affected eye was microphthalmic in 11.

This report created a considerable amount of interest in the State of South Australia, where a committee was appointed to investigate the findings. The panel consisted of an internist, a pediatrician, an ophthalmologist and an otologist. Every child born with a congenital malformation was either checked by them, or, if it lived in an outlying district, a form was sent to the doctor in charge. Swan et al[2] reported their findings in the *Medical Journal of Australia* in September 1943.

In this series there were 31 mothers who gave birth to children with congenital defects. Of these, all except 2 had contracted German measles during the first 3 months of pregnancy. Also, it was found that of the 25 patients who contracted rubella in the first 2 months of pregnancy (8 in the first month and 17 in the second) all of them later gave birth to infants with congenital abnormalities. However, of the 8 who developed rubella in the third month of pregnancy, only 4 gave birth to congenitally defective children.

Among the 31 babies with congenital abnormalities, there were 14 with eye defects, of whom 13 had cataracts and 1 buphthalmos. In 10 cases the cataracts were bilateral, and in 3 unilateral. Most of the cataracts were of the nuclear type, and conformed exactly to Gregg's description of them. The opacity had the appearance of a flattened dense white disk, in which 6 radiating white lines were visible (Y sutures). There was a clear zone peripheral to the opacity. The whole lens was small, and during operation it tended to move with the discission needle. Discission was difficult, owing partly to the small cornea and shallow anterior chamber, but more especially to the dense nature of the cataract. The capsules seemed to be adherent to the cataracts, and it was necessary to thoroughly break up the cataract with the needle. Gregg stressed the desirability of early operation if nystagmus is to be avoided, particularly in the bilateral cases.

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* Read before the Washington Ophthalmological Society, April 24, 1944.

In addition to the ocular defects, there were other congenital abnormalities. Nine of the babies had a cardiac lesion. Three were probably also mentally deficient, and one had club feet. Seven of the babies were deaf. There were also cases of microcephaly and mental retardation.

These last investigators concluded that if a woman contracts rubella in the first 2 months of pregnancy, her chances of giving birth to a congenitally defective baby are in the neighborhood of 100 per cent, while if she contracts rubella in the third month they are about 50 per cent. Even after the third month there is still a slight possibility that she may have a congenitally defective child.

These reports excited my curiosity, and I have reviewed my own cases of the past year and those of as many of the local ophthalmologists as I could disturb in these busy days. It was of no great value to go back beyond the past year, since the mothers could not remember whether or not a slight rash had appeared during their early days of pregnancy.

REPORT OF CASES

Baby R. V. was seen by me in January 1944, in consultation with Dr. John Washington. Three weeks previously, at birth, the mother noticed a cataract on the left eye, and this was confirmed by my examination. At this time the right lens appeared clear, but on second examination on February 15, 1944, the right lens seemed moderately opaque, while the left lens was entirely opaque. This child had a cardiac murmur. The mother gave a definite history of German measles during the first month of pregnancy. Operation will be performed on this child in the near future.

Baby N. A. was seen by me on October 7, 1943, in consultation with Dr. Benjamin Golden. At this time the infant was 3 days old. The left eye was found to be greatly and irregularly enlarged from congenital glaucoma, and the cornea could be defined only with difficulty. Enucleation is advised in the not too distant future. The history of the exanthem in this case demonstrates the difficulties in eliciting this finding. The mother states that during her third month of pregnancy her 3-year-old child had German measles. At this time she had a chest rash. The pediatrician asked her whether she also had the measles, but she said, "No, only a few pimples." These had disappeared the next day. Undoubtedly, she also had a mild and transient case of rubella, and would not have even remembered the event if she had not been questioned closely.

Baby P. A. was examined in consultation with Dr. Bernard Gurwin in November 1943. He was found to have mature cataracts in both eyes. The mother gave a story of "three-day measles" during the second month of her pregnancy. On December 8, 1943, Dr. Gurwin made a keratome incision in the right eye and performed an iridectomy. He found the lens capsule adherent to the iris. The lens was thoroughly broken, but on lavage very little lens material could be washed out. Postoperatively an exudate formed, causing the iris to be displaced upward and obliterating the pupillary space.

The last case was one reported to me by Major Meyer Riwchun from his service at the Walter Reed Hospital. This was in a baby with congenital buphthalmos. The mother gave the following story: "In the last week of my third month of pregnancy, I remember vividly having a severe case of measles. I was on the train to California and upon arrival broke out in a severe rash which was diagnosed as measles. I stayed in bed 7 to 8 days because of a high temperature."

DISCUSSION

These 4 cases certainly seem to lend support to the claims of the above-mentioned investigators that exanthematous disease in the mother during the early months of her pregnancy can result in a child with congenital ocular abnormalities. Here we have 3 cases of rubella and 1 of morbilli. In the 2 cases in which the exanthem occurred during the second month of pregnancy the infants had cataracts, while in the 2 with the disturbance in the third month, congenital glaucoma was present.

It is not to be understood that all cases of congenital ocular abnormalities are due to an exanthematous disease in the mother during pregnancy. Undoubtedly many other factors can operate to produce such disturbances. However, Swan et al claim that all mothers with such exanthemata during the first 2 months of pregnancy will give birth to children with congenital abnormalities, and certainly my own findings tend to bear him out. However, many thousand more cases will need to be compiled before these findings are accepted as fact rather than coincidence. In view of the medical and social implications of these results a careful statistical study should be undertaken at once by a well organized university clinic to establish their validity.

Rubella has been regarded as one of the most innocuous of the exanthematous diseases. We are now faced with the fact that the virus attacking a pregnant woman before the placental barrier has been developed can cause a disturbance to the developing fetus, and particularly to the optic buds.

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Another use for the red blood cells left over in plasma production. Another use for one of the by-products of plasma production—applying the left over red blood cells in the form of a paste to open wounds—is reported in *The Journal of the American Medical Association* for July 15, 1944, by Lieutenant Clifford K. Murray, M.C., U.S.N.R., and Captain C. M. Shaar, M.C., U. S. N.

Plasma is the liquid portion of the blood. Use of the left over red blood cells for the treatment of certain types of anemia already has been reported. Another left over portion or fraction of the whole blood in plasma production, known as gamma globulin and which contains all of the antibodies in the blood, also is being utilized as a preventive for measles and now is being released by the armed forces for civilian use.

The use of human red blood cell paste for topical application, the two navy doctors point out, "is not a panacea for chronically infected wounds but may be successfully employed in selected cases in which the slow healing is the result of local circulatory impairment. In our group of cases it was in this type of wound that the best results were obtained. This method is not indicated in tuberculous or syphilitic ulcers."

The two men have formulated a sterile paste composed of concentrated red blood cells, tragacanth and hexylresorcinol.

As for the method of application, the wound is cleansed with a solution of sodium chloride and dry gauze. The paste is then applied with sterile cotton applicators. Superficial wounds and burns are treated by applying a thin film of paste over the area, which is allowed to dry before being covered with a sterile dressing. If infection develops, the crust is removed, the wound cleansed lightly with a solution of sodium chloride and a second application of the paste is used. A sterile scab soon develops under which the wound heals. In deep wounds the paste is applied freely and in relatively large quantities, after which the wound is covered with a sterile dressing. When the wound is redressed, the two men report, it is noted that a rather large quantity of the paste is absorbed by the affected tissues. The wounds are dressed either once or twice daily, depending on their condition or progress.

They report that 66 patients with open wounds have been successfully treated with the paste and powdered red blood cells. Four cases failed to improve under this method of treatment.

"The mode of action of the red blood cell paste," the two officers say, "is undetermined. The most plausible theory is that required nutritional elements or proteins are supplied to tissue which may be deficient in these substances because of inadequate circulation. The red blood cells appear to be absorbed to a certain degree by the tissues until the granulations reach the surface and a crust forms. This crust of red blood cells apparently serves the function of protection, a source of nourishment and as a scaffolding for the support of the connective tissue. The new epithelium extends over the surface under the crust, and when the latter drops off the surface is completely covered. The red blood cells appear to stimulate the growth of granulation tissue and then act as a medium for the growth of epithelial cells over the granulating surface. This is important, since the most frequent problem in connection with an extensive granulating wound is to get the epithelium to grow over the surface."

A MODERN APPROACH TO THE DIVORCE EVIL

JOHN R. ERNST, M.D., F.A.P.A.

Washington

KNOW thyself" becomes an admonition of gravest import when contemplating marriage. The happiness of two people, at least, is at stake, and if children are born their entire lives may be blasted by the incompatibility of the parents. Young people who have been unable to break away from an infantile attachment for some member of the family will never become happy husbands or wives. They remain emotionally immature, and to adjust to life as they find it requires that the couple be adults emotionally as well as mentally and physically.

This adult infant type is seen in the only son or only daughter who has an emotional fixation on the parent of the same or the opposite sex. The fixation continues after marriage both in mother-son as well as mother-daughter attachments. There is a large unconscious sex element in this fixation. No lasting happiness is possible unless the couple can free themselves from this influence. The father-son attachment is exceedingly rare and the father-daughter attachment second in frequency to the mother-son attachment.

All psychiatrists are familiar with these abnormal emotional attachments or fixations and their direful effects on the married couple. They invariably result in sexual incompatibility with its usual train of woes leading to nervous and mental diseases, loss of physical health, and wrecked lives.

To have a retarded emotional development makes the individual entirely unfit for the duties of life. He cannot forget his childhood when every one catered to his every whim and he reigned as king. When the going in life becomes particularly rough he looks for sympathy. His wife must play the role of mother or the husband the role of father. The wife, if an adult infant, usually goes to her mother for comfort. If the mother is not living she has some older woman friend who is made to substitute. The adult infant may have an emotional fixation on a brother or a sister which is just as undesirable.

From these various childhood attachments parapathies result which prevent a complete transference of the love life to a suitable love object. As a result the individual's personality never reaches full maturity. There is a splitting of the personality or, in other words, it becomes divided against itself. A maladjusted love life usually results with its aftermath of unhappiness and tragedy. The adult infant is selfish, overbearing and arrogant. He seldom has peace or contentment of mind and may develop a chronic neurosis. An only son or only daughter is particularly liable to become an adult infant because of the reluctance of the parents to subject them to any hardships and otherwise "spoiling" them.

In observing lower forms of life we can learn a valuable lesson in this respect. When birds become developed enough to fly they are coaxed or driven from the nest. The young of all animals are certainly discouraged from remaining in the home environment after they are grown. In many cases they are driven away. The lower animals follow an instinct in this respect which should be carefully considered by the human animal. It will not be the first time we have learned from nature.

When there are two or more grown children in a family it is quite common for quarrels to occur among the children or they may find fault with their parents or their home. There may be violent antagonism against one or both parents. The above conduct should not be misunderstood by the parents. It is simply the instinct of the young animal trying to drive him out into the world in order that he may be emotionally free to express himself and become an adult in every sense of the word. If children were encouraged to heed this instinct, or develop it more fully if it is weak, the possibility of a normal happy life is greatly increased.

It will be noticed that a son who is an adult infant marries, as nearly as possible, the duplicate of his mother, that is, a girl of his mother's type and as old or older than himself. This is also true of the daughter who is an adult infant. One reason for this is a desire to reproduce the home situation of childhood as nearly as possible because it represents safety and freedom from worry and danger. Fear of incest may also be a factor in the choice of a certain type for husband or wife.

Another type who should not marry is the homosexual. This type, whether of the conscious or unconscious type, is entirely unfit to marry. The latent or overt homosexual will usually have enough doubts and misgivings about marriage to warrant him going to a psychiatrist for an analysis of his personality. Many of this type marry with the idea that they can acquire the normal feeling toward the opposite sex. This is impossible because their sexual nature is biologically fixed or has become conditioned long before marriage.

The homosexual man or woman is a sadist as far as the opposite sex is concerned. Sex crimes result from an apparently uncontrollable outburst of the sadistic impulse against the female by homosexuals. It is well known among psychiatrists that the homosexual often marry in an effort to acquire heterosexuality or cover up their homosexuality.

The homosexual woman is found just as frequently and is the cause of just as much marital woe as the homosexual man.

We have all seen among married people the sadistic husband and the masochistic wife, or the reverse. The one who is the sadist, in either case, is a homosexual and should never have married. Worse still, the children of such parents are often constitutional psychopathic personalities or sexually abnormal and make up a large part of our criminal classes or are inmates of institutions for mental disease.

All psychiatrists agree that there is a biological factor in the majority of delinquents and criminals. Research into the origin of the delinquent and the voluminous literature describing his many and varied conduct disorders, as in descriptive psychiatry of the Kraeplinean days, will be amply justified if the psychiatrist now turns his efforts to doing something about it.

Child guidance clinics have been doing research along these lines for many years. If we are to get anywhere in decreasing the number of delinquents or potential criminals, we must begin with the parents.

It is quite apparent that too little attention is being paid to the all important question of preventing the unfit from reproducing. The homosexual and those afflicted with other forms of sexual abnormality should be advised against marrying, or at least having children.

In breeding pedigreed stock only the most perfect animals are used. Surely the human animal, or race, is entitled to as much consideration.

The mating of the masculine, dominating woman with the effeminate man, both of the endocrine dyscrasia type and biologically abnormal, is a biological error and a social crime. The majority of their offspring have been found to be problem children, sexually abnormal, constitutional psychopaths, and potential, if not actual, criminals. The above example of mismating is one of many and is quite common.

It requires only superficial observation and study to realize that marriage, or reproduction, should be prevented except in the biologically and mentally fit. It is the psychiatrist's duty to advocate eugenics and warn society of the price it must pay if it continues to permit the mating of the unfit.

The masculine woman and effeminate man cannot react toward the opposite sex or society as the so-called normal or average man or woman. No amount of change of environment, psychotherapy, or psychoanalysis can change the endocrine or biological pattern of this type of individual.

While all homosexuals or inverts have a conscious or unconscious dislike or hatred for the opposite sex, the criminal type is rare. Nature has endowed them with the creative instinct as she has every living thing. Since the normal outlet is denied them, those who have insight or understand themselves find expression for this instinct in creative work. Repression of this fundamental basic instinct, whether in the normal or invert, always produces severe emotional states, or more serious mental trouble. To know oneself from the point of view of sex is of paramount importance if we are to attain health and happiness.

It is well known that chronic fear, grief, or worry, especially based upon marital unhappiness or sexual dissatisfaction, can produce symptoms of extraordinary variety. These emotional states are intimately bound up with functional changes in various internal organs produced through the intermediary of the sympathetic and endocrine systems. The common pelvic symptoms in such circumstances are caused by changes in the circulation which produce passive congestion, menorrhagia, dysmenorrhea, amenorrhea, backache, fatigue, leukorrhea, and frequent micturition.

Many of the milder types of emotional disorders are seen by general practitioners of medicine who diagnose them as nervous dyspepsia, gastric neuroses, and similar maladies. If such diagnoses cause physicians to confine their treatment to individual organs rather than to sick personalities, patients may continue to search for relief from emotional distress, and may go far and wide out of the medical profession.

Every psychiatrist is familiar with cases of emotional distress producing autonomic disturbances. Lack of insight prolongs and aggravates the symptoms causing hypochondriasis and neurotic fixations. Acute or chronic emotional disturbances may bring about changes in the chemistry of the body causing physical disorders, or lowering the patient's resistance to infectious diseases. Psychotherapy administered by trained psychotherapeutists is undoubtedly the best method of treatment of these conditions, since it is the only method that removes the cause, viz., emotional and mental conflict.

As a psychiatrist I desire to concur in the following valuable and timely advice given by Dr. R. L. Dickinson, an outstanding authority, when he states, "Based on a long series of patients' histories and decades of premarital instruction, I find it important to carefully consider preventable maladjustments, such as inhibitions that result in frigidity and details of anatomical abnormalities that produce pain in coitus, and vaginismus." He urges the profession to develop systematic methods to forestall such troubles, and insists that medical advice on major problems before engagements are announced, with complete examination before wedding days are fixed, should come through custom rather than by compulsory laws and that the clear-cut duty of the physician is positive. His job is to forestall trouble and to seek occasions for forestalling trouble.

Many states now require physical examinations prior to marriage. Why not a personality analysis and endocrine study as well? It is the definite responsibility of the psychiatrist to take the lead at once in this campaign of education, or it will be taken by those less qualified.

THE PREVENTION OF PULMONARY EMBOLISM

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INTEREST in this subject was attracted by the apparently high frequency of this condition as a cause of death at St. Elizabeths Hospital. Much has been written and said upon this subject in the past few years. New approaches and therapies have developed. An analysis of several cases of pulmonary embolism that have come to necropsy at St. Elizabeths Hospital is offered with the hope of stimulating interest in the application of these new principles.

INCIDENCE

Snell at the Mayo Clinic and Dietrich in Germany found pulmonary embolism as the cause of death in 8 per cent of all autopsies.[1] In a series of 287 consecutive autopsies performed recently at St. Elizabeths Hospital pulmonary embolism was the cause of death in 27 or 9 per cent.

ETIOLOGY

The conditions predisposing to pulmonary embolism are well known. They include the formation of mural thrombi in bacterial endocarditis, auricular fibrillation and myocardial infarction; phlebitis and phlebothrombosis; recent surgical operations; severe trauma. We are chiefly concerned with phlebitis and phlebothrombosis and recent surgical operations, particularly amputations. Of these phlebothrombosis is the principal offender because of its tendency to form a large easily detachable clot.[2] DeBakey[1] and Homans[2] assert that thrombophlebitis which is easy to recognize rarely causes pulmonary embolism because of the adhesiveness of the clot. Priestly and Barker[3] found pulmonary embolism in 24 per cent of 938 cases of thrombophlebitis. In 100 out of a series of 165 autopsies referred to by DeBakey[1] ante mortem thromboses were found in the legs. Homans[2] reported 11 cases of quiet thrombosis causing pulmonary embolism in ambulatory patients. Veal[4] has a series of 275 amputations without high femoral ligation which were attended by death in 14.9 per cent of pulmonary complications.

Factors associated with the development of phlebitis and thrombosis are: (1) venous stasis which occurs in prolonged bed rest and obstruction; (2) local injury of the endothelium produced by stretching, contusions, chemical injury and bacteria; (3) thrombophilia or changes in the circulating blood; and (4) simple stretching or mild contusion. True thrombophlebitis occurs in association with prolonged bed rest with associated infection as after operation, intravenous therapy, puerperium, convalescence from pneumonia, influenza or typhoid fever.

Of 31 cases with necropsy at St. Elizabeths Hospital in which pulmonary embolism occurred, the pulmonary embolism was the cause of death in 27. Three followed amputation, 1 gangrene without amputation, 2 cerebral infarction, 1 a fractured femur, and 1 general furunculosis. Three were associated with a dehydration exhaustion syndrome in individuals aged from 17 to 37 as a sequel to psychotic excitement. One was thought to complicate lobar pneumonia, but the pneumonia turned out to be a preliminary small infarct. Six were associated with debility and arteriosclerosis; 1 with diabetic coma; 2 others with diabetes and arteriosclerosis; and 1 followed craniotomy for a meningeoma. The remainder were made up of other miscellaneous, prolonged debilitating conditions. The ages ranged from 17 to 85 with the majority toward the higher age. In only

1 of the fatal cases there was a mural thrombus in the right heart. The source of the emboli in the rest was undoubtedly in unsuspected phlebothrombosis or phlebitis.

EARLY RECOGNITION OF PHLEBOTHROMBOSIS, THROMBOPHLEBITIS AND NON-FATAL PULMONARY INFARCTS

Thrombophlebitis is not difficult to recognize because of the rather characteristic symptoms. It is not quite as important as phlebothrombosis for the reasons discussed above. The signs and symptoms of phlebothrombosis are few and difficult to recognize. There is an increase in pulse rate, tenderness over the vein and pain in the calf when the foot is passively dorsiflexed. The superficial veins may be dilated. In 897 cases of pulmonary embolism at the Mayo Clinic 50 per cent had 1 non-fatal episode, 25 per cent had 1 fatal episode, and 25 per cent had multiple episodes, some fatal and some not.[3] In 343 cases of fatal pulmonary embolism one third had previous embolism. This indicates that if the nonfatal pulmonary infarction which heralds the terminal event can be detected, measures may be instituted to prevent it. In 7 of 30 cases of pulmonary embolism at St. Elizabeths Hospital well formed, small infarcts were found post mortem which must have been caused by preliminary emboli, none of which was suspected. In 1 of these the patient was believed to have pneumonia from which he was convalescing when the terminal embolism occurred. In the cases of Veal[4] and DeBakey et al[1] all of the small infarcts presented the signs and symptoms of pneumonia, physical signs, constitutional symptoms and X-ray appearance. In practically none were the infarcts recognized. Murnaghan, McGinn and White[5] have demonstrated a typical electrocardiographic pattern of acute cor pulmonale in one third of 92 cases of pulmonary embolism. This may serve as an aid to the diagnosis of the small preliminary infarct.

If the occurrence of the small pulmonary infarct is suspected, phlebothrombosis probably exists in the lower extremities. DeBakey, Schroeder and Ochsner[1] have described a routine for phlebography with Diodrast which seems very promising. The technic is very simple and should lead to prompt presumptive localization of the thrombus and suggests appropriate measures at once.

PREVENTIVE PROCEDURES

The value of increasing the rate of the static venous circulation has been demonstrated recently by Potts,[6] who employed the routine of having the patients take 15 deep breaths with active flexing of the legs with each breath twice a day starting on the eve of the operation. In 837 patients who followed this routine there was no phlebothrombosis or pulmonary embolism. In 124 who were immobilized because of fractures there were 5 phlebothromboses and 4 infarctions. In 150 postoperative cases in which this prophylactic method was not used there were 4 instances of phlebothrombosis.

Considerable attention has been focused on the use of anticoagulants to prevent thrombosis. Crafoord[3] in Europe gave heparin in 325 postoperative cases. Of these only 3 patients developed thrombo-embolic phenomena as compared to a group of 302 similar patients who had no heparin and in which 17.5 per cent had thrombo-embolic phenomena. Priestly and Barker[3] at the Mayo Clinic gave heparin to 63 patients in whom nonfatal embolism had already occurred. Only 2 of these succumbed to another episode of embolism. They used the Toronto product and gave 20 mg. per hour in saline solution continuously for 7 to 10 days. This can be seen to be a difficult procedure in addition to the costliness of the drug and the occasional complication of bleeding (which has not, however, been found to be serious). Allen, Barker and Waugh[7] described their experience with dicumarol (3,3′ methylene-bis- 4 hydroxycoumarin) in postoperative patients. They gave the drug by mouth in 100 mg. capsules. This drug destroys or inhibits the production of prothrombin. It can be given only in close cooperation with the laboratory. The prothrombin time must be kept between 35 and 60 seconds (by the Quick and Magath method). In 374 postoperative cases only 3 patients had thromboses during the administration of this drug. Dicumarol has a latent period of action, and heparin must be given during that time. Unlike heparin, whose action stops shortly after its use is discontinued, dicumarol continues to exert an action for 3 to 10 days. This sounds attractive but is not yet generally available. It should also find application in cases of auricular fibrillation and myocardial infarction in which mural thrombi menace. It is said to be contraindicated in subacute bacterial endocarditis, in which a bleeding tendency already exists.

If the majority of the cases that we are concerned with are those eventuating from phlebothrombosis, the simplest, most easily available and direct approach to prevention of pulmonary embolism is the early recognition of phlebothrombosis and the immediate operation of high ligation of the femoral vein or veins or aspiration of the thrombus and then ligation. Allen[8] in a review of 202 cases had no deaths and no severe disabling sequelae from this operation. He uses as indications pulmonary infarcts, tenderness over leg veins, swelling of the leg, however slight, and discomfort in the calf if the foot is passively dorsiflexed. He recommends bilateral interruption of the femoral veins in a large majority and advocates that the procedure be done at one sitting. Veal[4] by doing routine high femoral ligations in 80 amputations had only 1 pulmonary complication compared to his previous high percentage.

Summary

A review of pertinent literature on the prevention of pulmonary embolism is discussed in relationship to a series of 31 cases of pulmonary embolism occurring at St. Elizabeths Hospital. Clinical experience at St. Elizabeths Hospital has duplicated that occurring elsewhere in the uncontrolled manifestations of thrombo-embolic phenomena. It is hoped that the diagnostic and therapeutic procedures now available will find more active application.

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Prevention of Peptic Ulcer. Pointing out how to avoid flare-ups of ulcers of the stomach and duodenum, Walter C. Alvarez, M.D., Rochester, Minn., says in *The Journal of the American Medical Association* for July 29 that "the patient with ulcer is most in danger of a flare-up or a catastrophe during the hours immediately following a distressing emotional storm. Then is the time when, probably with an increase in the acid gastric secretion, and perhaps a decrease in the alkaline and neutralizing secretions that flow into the duodenum, or a combination of these two processes, the acidity of the contents of the first portion of the duodenum becomes so high that an ulcer either develops or, if present already, promptly becomes greatly deepened. . . .

"Under the circumstances it would seem obvious that the time to start strenuous treatment should always be immediately after a psychic strain has come. . . ."

THE PROGNOSIS OF SPONTANEOUS SUBARACHNOID HEMORRHAGE

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THE syndrome termed spontaneous subarachnoid hemorrhage may be defined as a hemorrhage into the subarachnoid space resulting from an intrinsic defect or disease of a cerebral artery. By arbitrary definition the word "spontaneous" has come to exclude all cases of subarachnoid hemorrhage resulting from trauma, specific infections and blood dyscrasias.[1] This leaves only arterial degenerative disease as arteriosclerosis and aneurysms of nonbacterial origin to be considered. According to some writers almost the only cause of spontaneous subarachnoid hemorrhage is rupture of an intracranial aneurysm.[2, 3, 4, 5] However, most observers take a broader view and include arteriosclerosis as a frequent cause of spontaneous subarachnoid hemorrhage.[1, 6, 7, 8, 9]

Richardson and Hyland[3] are recent proponents of the aneurysmal rupture cause of spontaneous subarachnoid hemorrhage. In their series of 118 cases seen over an 11-year period in which there were 61 fatal cases, they were of the opinion that regardless of the age or associated evidence of arteriosclerosis the cause of the subarachnoid hemorrhage in each case was rupture of an intracranial aneurysm. Thirty-four of the fatal cases were examined post mortem. Twenty-seven of these had ruptured berry aneurysms, one had an arterial angioma of the cerebellum and in 5 the bleeding point was not found. The 5 cases in which the bleeding point was not found were explained by noting that a careful dissection of the cerebral arteries was not done in the early years of the series. Sands[6] supports the more conservative view. In a series of 120 cases of subarachnoid hemorrhage of all types he lists 30 as caused by arteriosclerosis and 25 as caused by intracranial aneurysms. Whether or not arteriosclerotic involvement of a cerebral artery may precede an aneurysmal dilatation which subsequently might rupture is an undecided problem.[3, 6] It would seem reasonable to assume that the presence of arteriosclerosis would add to the gravity of the situation and would influence the prognosis in a given case regardless of the primary origin of the subarachnoid bleeding.[7] None the less it is a commonly accepted fact that many of the ruptured intracranial aneurysms occur in young people in whom no evidence of arteriosclerosis can be found grossly or microscopically at autopsy.[1, 2, 3, 4, 5]

There is strong evidence to support the view that these intracranial aneurysms result from developmental defects in the media of the vessel wall. Eppinger[10] in 1887 suggested that intracranial aneurysms were congenital resulting from a defect of the elastic tissue. Turnbull[11] and Forbus[12] have demonstrated the presence of defects of the media of cerebral arteries at the apices of angles formed by arterial branching or bifurcation. At autopsy these cases of ruptured aneurysm most often show the location of the aneurysm to be in and about the circle of Willis especially at the junction of two or more vessels.[3, 6]

The diagnosis of spontaneous subarachnoid hemorrhage has been amply discussed in the group of some 120 articles dealing with the subject which have appeared in the English literature since 1929. As to treatment everyone is in agreement as to the necessity for absolute bed rest for a period of several weeks.[3] The use of daily spinal fluid drainage is a disputed point and will be mentioned again as it pertains to prognosis.

The difficulties met with in the prognosis of any single case of spontaneous subarachnoid hemorrhage have been pointed out many times. The following discussion is an attempt toward establishing some reasonable criteria upon which the prognosis of each case of spontaneous subarachnoid hemorrhage can be based.

When seeing a patient for the first time soon after the onset of the bleeding process the physician must bear in mind that a guarded prognosis is in order. It is impossible to predict whether a recurrence of the bleeding will occur shortly after the initial hemorrhage or even whether the original bleeding point will continue to ooze so that the patient will continue downhill and die in a few hours or days. Several factors must be taken into consideration. Perhaps the most important is the age of the patient.

EFFECT OF AGE OF PATIENT

In general the prognosis is worse the older the patient. Two well controlled series of cases of spontaneous subarachnoid hemorrhage have been combined in order to better evaluate the mortality rate in the various age groups.

Eighty-one cases were taken from Taylor and Whitfield[13] and 118 cases from Richardson and Hyland.[3]

*Age at Onset**	*Total Number of Cases*	*Total Number of Fatal Cases*	*Percentage of Fatal Cases*
0–20	14	6	43
20–40	66	31	46
40–60	92	53	57
60 on	27	22	81

* It was necessary in order to combine the two series to allow an overlap of one year between age groups.

The above table clearly shows that while the prognosis is not good in any age group it is considerably worse in older patients.

PRESENCE OF CARDIOVASCULAR DISEASE

The presence of demonstrable cardiovascular disease seems to have a definite adverse effect upon the chances of survival of a given case of spontaneous subarachnoid hemorrhage. In a group of 69 cases of subarachnoid hemorrhage collected by Strauss and Tarachow,[7] 39 had cardiovascular disease diagnosed clinically. Fourteen of these died on first admission. Thirty had no clinically discoverable disease except subarachnoid hemorrhage. Four of these died on first admission. Gale[14] states that the mortality of spontaneous subarachnoid hemorrhage in the older age group with arteriosclerosis is nearly doubled as compared with the mortality of the younger group without arteriosclerosis. It is interesting to note that the poorer prognosis encountered with advancing years is not necessarily related to involvement of cerebral arteries by an arteriosclerotic process. Conway[15] presents a group of 43 cases of ruptured cerebral aneurysms proven at autopsy. Twenty-four cases were aged 40 or older at time of onset of symptoms. Of these, 13 showed evidence of arteriosclerosis of cerebral vessels and 11 had normal cerebral vessels except for the aneurysms.

HISTORY OF PREVIOUS ATTACK

A history of a similar previous attack is thought by a few observers to better the prognosis for an attack of spontaneous subarachnoid hemorrhage.[3, 7] Assuming that spontaneous cure of a cerebral aneurysm could occur by thrombosis of the sac,[16] it would seem reasonable that healing would be promoted after rupture and subsequent thrombosis had occurred in the aneurysm. Richardson and Hyland[3] give a mortality of only 17.5 per cent for cases of spontaneous subarachnoid hemorrhage with histories of multiple attacks.

EFFECT OF HYPERTENSION

Gale[14] stresses the importance of an elevated blood pressure. A blood pressure of 200 mm. Hg systolic is of the utmost significance. From a study of 168 cases of spontaneous subarachnoid hemorrhage that I have collected from the literature only 2 instances were found in which a patient had survived an attack of spontaneous subarachnoid hemorrhage with a systolic blood pressure over 200.

Appearance of Neighborhood Signs

When focal signs appear in a case of spontaneous subarachnoid hemorrhage signifying invasion of the brain substance by the hemorrhage the prognosis is a little worse than when no focal signs are found.[3] In a group of 148 cases of primary intracerebral hemorrhage selected because they all presented bloody cerebrospinal fluid there was an overall mortality of 88 per cent.[3] It must be kept in mind that a large internal capsular hemorrhage may rupture into the lateral ventricle giving blood in the cerebrospinal fluid and a picture which could be confused with primary subarachnoid hemorrhage.[17]

Bloody Cerebrospinal Fluid

It was stated at the beginning of this discussion that it is impossible to predict whether a recurrence of the bleeding will occur shortly after the initial hemorrhage. However, by following the condition of the cerebrospinal fluid it is possible to tell in certain cases if there has been recurrent bleeding in the interval between spinal puncture. In Sprong's[18] group of 15 cases of traumatic subarachnoid hemorrhage blood disappeared from the cerebrospinal fluid within 5 to 6 days. Since these cases undoubtedly did not have any appreciable amount of recurrent bleeding after the initial traumatic incident, a corollary can be drawn between these cases and cases of spontaneous subarachnoid hemorrhage in which the blood disappears from the cerebrospinal fluid within 4 to 6 days. In other words, it would seem that in cases with no bleeding into the subarachnoid space after the initial catastrophe there should be a clearing of red blood cells from the cerebrospinal fluid within 4 to 6 days. Actually in cases in which recovery from attacks of spontaneous subarachnoid hemorrhage is uneventful blood disappears from the cerebrospinal fluid in periods varying from 4 to 20 days.[3, 19, 20] Xanthochromia may persist as long as 40 days.[3] The bearing of the condition of the cerebrospinal fluid upon prognosis is obvious. If the cerebrospinal fluid is clear of red blood cells in 4 to 6 days, the immediate prognosis is better than if it remains bloody for a prolonged period.

Meningeal Signs

Signs of meningeal irritations are thought of as almost constant parts of the picture of spontaneous subarachnoid hemorrhage.[17] However, as in all conditions encountered in medicine, the classical signs may not be present. Savitsky[21] described 7 cases of subarachnoid hemorrhage without meningeal signs of irritation. Of these only 1 died, and since this was shown at autopsy to be a case of extensive intracerebral hemorrhage rupturing into the subarachnoid space it cannot be placed in the category of subarachnoid hemorrhage. Cases of subarachnoid hemorrhage without meningeal signs are, no doubt, often missed and recover without having been diagnosed. In the occasional instance in which spontaneous subarachnoid hemorrhage is diagnosed without the presence of meningeal signs the prognosis may be looked on as favorable.

Significance of Leukocytosis

The presence of leukocytosis, if marked, is a significant point in prognosis. Scant reference to this fact is made in the literature. Musser[22] states that a marked leukocytosis is a general but not constant rule after hemorrhage. Sands[6] relates this to spontaneous subarachnoid hemorrhage. In his opinion a high degree of leukocytosis with a count over 20,000 generally points toward a massive cerebral hemorrhage, ventricular hemorrhage or to continuation of the bleeding.

SUMMARY

The prognosis concerning a case of spontaneous subarachnoid hemorrhage may be evaluated to some extent by considering the following factors. They have been discussed and are listed in the order of their probable importance.

1. Age of the patient
2. Presence of cardiovascular disease
3. History of previous attack
4. Blood pressure
5. Neighborhood signs
6. Cerebrospinal fluid
7. Meningeal signs
8. Leukocytosis.

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Studies show nicotine causes constriction of blood vessels. Reporting studies showing that nicotine causes constriction of blood vessels, three Mayo Clinic investigators advise in *The Journal of the American Medical Association* for July 15, 1944, that the habit of giving an injured soldier a cigaret is not advisable if an injury to an artery has occurred, as spasm of the artery is common in such types of injuries and the constriction of blood vessels in a person sensitive to tobacco may cause irreparable damage.

Grace M. Roth, Ph.D.; Captain John B. McDonald, Medical Corps, Army of the United States, and Charles Sheard, Ph.D., Rochester, Minn., who studied the effect of smoking cigarets, also advise as a result of their observations that the smoking of standard cigarets should be avoided in the presence of peripheral vascular disease.

Their observations on 6 normal subjects yielded the following results:

When the subjects were resting in a supine position after smoking two standard cigarets or French ashless cigaret paper with standard tobacco or standard cigarets in a British cigaret filter holder the cutaneous or skin temperatures of the extremities of all the subjects decreased. In contrast, as proof that this resulted from the nicotine content of the standard cigarets, when two corn silk cigarets were smoked there was little if any change of the cutaneous temperatures of the extremities.

When fully clothed normal subjects were sitting or engaged in slow walking, the temperatures of the extremities also decreased to the same degree after the smoking of two standard cigarets as while the subjects were in a resting, supine position.

Consistent changes of the electrocardiographic tracing developed after the smoking of two standard cigarets. The changes included an increase of the rate of the heart beat. Changes were negligible after the smoking of corn silk cigarets.

As further evidence of the vasoconstrictive effects of the nicotine content of standard cigarets, it was found that when a weak salty solution was given intravenously previous to the intravenous injection of nicotine there was at first a slight drop of the cutaneous temperatures of the extremities, but when nicotine was added to the solution (without the knowledge of the subjects) the decrease was rapid and pronounced. After the injection of nicotine the electrocardiographic tracing demonstrated a definite increase of heart rate even greater than that seen after the subjects had smoked two standard cigarets.

There was an increase of blood pressure and pulse rate after either the smoking of two standard cigarets or the intravenous injection of 2 mg. of nicotine. After the smoking of two corn silk cigarets there was little or no change of blood pressure and pulse rate.

As the three investigators point out, the effect of the smoking of tobacco on the circulation of man has been the subject of many excellent papers but there has been an apparent lack of agreement among various investigators as to the exact effect of the smoking of standard cigarets on the vascular system, particularly as to whether or not the vasoconstriction was due to the nicotine from the cigaret or to the cigaret paper or even the breathing.

President's Page

SERVICE PHYSICIANS COUNT ON YOU

Service physicians with whom I have talked are not unappreciative of the fact that physicians in civilian life have their headaches, too. They know, for example, that some of them are working much harder than they should and for this reason do not wish in any way to add to their burdens. However, service physicians are, with few exceptions, unable to do much about the issues which may profoundly affect medical practice in the future and must count on their brethren at home to look out for their interests.

What do service physicians look forward to when they return to civilian practice? First of all, they are hopeful that things at home will be very much like they were when they left. They expect to find their medical societies functioning as well or better than in times of peace. They will be sorely disappointed if this is not so. They will also count on adequate plans having been made for their return and for the inauguration of improved methods of providing medical care.

As your President, I feel confident that the physicians I have appointed to Society committees recognize these facts and will do their part well. Equally important, of course, is the support given by the rank and file of the membership. Do not let the pressure of wartime demands stifle your interest in our Medical Society. For once it begins to lag seriously our Society will deteriorate. This would be inexcusable in the absence of our service physicians, many of whom, as I have said, expect to find a live, not a somnambulant, organization on their return.

In explaining the disinclination of some members to serve on committees, one of our doctors said a short time ago that not a few of his colleagues were critical of organized medicine on a national level because it had gained public ill will and was doing nothing to put itself in a more favorable light. In this respect, he said, it had failed in its obligations to its membership.

Well, this might be argued pro and con. But the fact remains that organized medicine is made up of medical societies and they, in turn, are made up of individuals. Each has a job to do. All have spheres of influence. None can escape responsibility for whatever happens to medicine.

So let it not be said of our Medical Society or of us as individuals that according to our abilities we failed to interest ourselves in the welfare of the people and the medical profession. This is a duty we owe not only to ourselves and our Society but to our men in the services, who are unable to perform the functions which they would in normal times. We must not let them down.

Editorials

". . . A NEW MEDICAL ORDER IS INEVITABLE . . ."

Last June Wendell Berge, Assistant Attorney General of the United States and successor to Thurman Arnold as head of the Anti-trust Division, gave a scholarly address before the 14th Annual Meeting of the American Urological Association on "Justice and the Future of Medicine." The thesis of Mr. Berge's speech might be summed up in his statement that "In the advance of the arts of medicine, you have done a brilliant job. In the face of this advance it is all the more tragic that progress in the organization of medicine has lagged—and, because of this lag, the Nation has not had the full benefit of your superlative performance."

He then proceeds to explain what he means by "organization": ". . . as a group, physicians have been little exposed to the discipline of the social sciences, and social organization is as intricate and as full of mysteries as the art of medicine itself. So when I hear a physician speaking about the organization of medicine in a tone of doctrinaire finality, I cannot fail to remark the contrast with the courageous and humble search for truth displayed in his own work."

Of course Mr. Berge refers to the Group Health case. He does not dwell upon it at any length and concludes his remarks with this statement: "With the victory of the Government in the Supreme Court the case is now closed. I advert to it only because it has current significance. It is, to borrow a term from your profession, a symptom of a pathological condition in the organization of medicine. The organization of medicine has not kept up with its technology. The fault is not individual, but institutional. The cleavage is not to be eradicated by invectives, by isolation from modern thought, by clinging stubbornly to that which was once good. It can be resolved only by an escape from folk lore, a probing diagnosis, a conquest of prejudice, a drive at the very heart of the malady."

In a brief survey of trends, he mentions the passing of the family doctor who, he says, has been succeeded by the modern general practitioner. He points to the progress in medicine, particularly in the laboratory. He calls attention to social changes, especially in urban communities. "The standard of living," he says, "has moved to a place of primacy among our everyday concerns. It makes the costs of medical service an inescapable problem. The care of the sick can no longer be absorbed by the family; it becomes an item of expense in the budget. If it is a wage-earner who is ill, there is a double cost; absence from work means loss of earnings and bills are there to be paid. So medical service becomes a sheer economic necessity, for unless a man's capacity to work is maintained, he ceases to earn . . . .

"And within this urban, industrial, wage-earning society, men and women are becoming increasingly conscious of what they want. Our workers demand health as a condition of their livelihoods. They insist upon adequate medical service at a price they can afford to pay, and in their newly-won self-respect they will refuse all charity."

Finally he says, ". . . a changing medicine has not yet been adapted to its new world. The high objectives of the profession endure, for they are eternal. But they must be freshly applied. . . .

"In the not so long ago the old-fashioned doctor could be depended upon to administer medicine for the community. He could see to it that needs were met, service was adequate, and costs were justly distributed. The physician of today is in no position to discharge this office. His practice comprehends, not the whole community, but a mere fraction of it. If he is a specialist, the fraction is highly selective. And the whole body of physicians, each operating by himself, has no collective instrument by which it can apportion the totality of service in accordance with general need. . . . The sliding scale survives as a legacy from a simpler society. . . .

". . . It isn't that on the whole physicians are paid too much; the statistics I have seen lead me to believe that remuneration is quite inadequate. It is rather that there is waste, a failure fully to use facilities, a lack in getting the most out of a trained personnel.

"The result is a national tragedy. . . ."

What are the solutions?

Here Mr. Berge says, "The demand is for a vaster, more comprehensive, more reliable medical service. If an instrument of the common health can be provided on terms the people can afford, the people will rejoice. If you do not help them to it, the people will seize upon whatever agencies are at hand as a help in need. For the universal demand that the common health be served can not much longer be stayed."

"A great many physicians are justly fearful that the quality of service be compromised. From the profession I have frequently heard the argument that, when the Government undertakes to look after people's health, the service rendered is invariably poor. With this insistence on quality I fully concur. Nor do I dispute the fact that the new venture may provide a service that fails to meet the standards of the profession. But I cannot follow the argument that a causal relation exists between Government auspices and poor medicine. The truth is that a new system brings medical care to hosts of people who before have had no access to it. For them there can be no falling off in quality; there has been no service to fall off in quality. But under a new system the provision of doctors and facilities almost always falls short of the new and enlarged demand. As a result, doctors with exacting notions discover much with which they can find fault.

"But let's be fair and place the blame where it belongs. The shortcomings are not necessarily due to the new system. They are probably due to the shortage of personnel and equipment with which to work. . . ."

It might be called to Mr. Berge's attention that when he speaks of a "demand" for a "more comprehensive, more reliable medical service" there has been no evidence of great enthusiasm on the part of the public for a different system than we now have. The basis for this statement is the experience of all groups who have been or are experimenting with various types of voluntary sickness insurance plans. They learned early that they had a "selling job" to do and a difficult one. People just were not interested until they had been convinced of the need for protection against the costs of illness. So it can hardly be said that there is a demand. However, in the opinion of progressive physicians, and there are many such, there is genuine need for better distribution of medical care. Most doctors will agree with the argument that a new day in medicine is dawning.

Physicians will take issue with Mr. Berge on the ability of patients to choose their own doctors. "If we are downright honest," he says, "you and I know that the layman possesses neither the facts about the distinctive competence of particular physicians nor trustworthy norms to guide his judgment. In a matter of medicine, I am not foolish enough to trust my own choice—and a check with some of my lawyer colleagues indicates that they agree with me. I have over the years, through the devious ways by which a layman gets a little practical knowledge, discovered a physician or two whose judgment I have reason to trust. And with me it's their choice, not mine, which goes.

"How many patients have walked into your office whose ailments have been aggravated by an amateur's choice of a physician?. . ."

Mr. Berge is here on ground with which he is apparently not too familiar. There is the undeniable danger of a patient getting into the hands of an incompetent physician. However, the danger is not as great as Mr. Berge implies. The facts are that the modern physician is, on the whole, very well trained. There are, of course, still many medical practitioners who graduated during a period when standards of medical education were much lower than at present but even among them there is a progressiveness which usually assures satisfactory medical service.

Laymen often inquire, "Who is the best specialist [in a certain field] in the city?" The truth is that no one is competent to say, not even the physicians themselves. Doctors are severe judges of each other and are not infrequently biased in their judgment.

Professional training of itself is not the sole criterion of a physician's ability. In fact, scholastically brilliant products of our best medical schools have in some instances been poor doctors. Generally speaking, however, training should be an important factor in selecting a doctor. Of importance, too, is his personality. No matter how well trained the physician may be, if patients do not have confidence in him they will seek someone else. So if a layman takes the trouble to inquire into the education, postgraduate training and other qualifications of a physician, not neglecting to learn at first hand something about his personality, his chances of securing the services of a satisfactory medical practitioner are just about as good as if he takes the advice of medical friends.

It is certainly encouraging to have Mr. Berge say, "Your code of medical ethics has always elevated the relief of suffering above the pursuit of gain." Physicians who recall the statements made during the Group Health case will find this pleasant reading.

Mr. Berge sees no reason for being concerned about the form of organization under which the doctor labors, for he says, "You are right in insisting that high standards of medical care must not be compromised. But standards are a professional matter. Their chief dependence is upon adequacy of resources. They are not inherent in any type of organization. Your current way, as well as state medicine, has its insidious dangers. And, since comparative merits are at issue I am not content with any argument which points out vices in the one without looking at the faults of the other. . . ."

The medical profession will challenge the statement that the type of organization has no bearing on the professional side of medicine. For it has been demonstrated many times both here and abroad that conditions under which doctors work must be satisfactory if they are to do their best work.

Finally Mr. Berge speaks of the Wagner-Murray-Dingell bill. He says, "The course of events moves fast and to me a new medical order seems inevitable. My fear is not that we will not get it—an awakened public, sparked by our veterans, will see to that. My fear is that we will not bring to its creation all the knowledge, wisdom, understanding we possess. A reference to the Wagner-Murray-Dingell bill will make my point. About its intent and objectives there can be for me no dispute. Its detail of provisions, however, may or may not fall short of its purpose—I do not know. On ways and means I am open to argument in behalf of something which is better. In respect to the necessity of distributing the cost of protection against ills I am wholly convinced, and I think the American people are adamant.

"The medical order our stalwarts defend has already ceased to exist. . . . If doctors oppose, or stand on the side-lines, the layman will create a medical order which may prove to be indifferent or even blind to the values doctors prize most. If the doctors assume a role in creation, they can see to it that no compromise is made with the standards of the profession."

A majority of the medical profession will not seriously disagree with Mr. Berge's conclusions. Times are changing and will change a great deal more and it is obvious that medicine alone will not remain unaffected. As was stated in the beginning, Mr. Berge's address was an able exposition of his views on medicine and one which most doctors can read with profit. They will not approve of all he has to say, nevertheless they will find themselves in agreement with many of his views.

The address had its humorous moments. At one point Mr. Berge says, "The family doctor—with his bed-side manner, his nostrums, his ponderous vocabulary to conceal his perplexities, his downright devotion to duty and sacrifice of self—was once the very epitome of the art of healing." His reference to the family doctor's ponderous vocabulary is rather amusing because Mr. Berge's address could hardly be classed as light reading. In fact, the doctors who heard him must have been somewhat overcome by his command of language. For example, he comes up with this one, "A long course of cosmic, geologic, biologic events has made of him [Man] the permutation of things which anatomically he is." Later on he puts on the pressure, ". . . I have yet to discover a case in which a bungling physician was allowed to get off with a plea of *caveat emptor*." It would have been rather interesting to take a poll of the physicians present to ascertain how many of them knew what Mr. Berge meant by "*caveat emptor*." However, it is not the intention to quibble over such trivialities, for as has already been indicated, the speech was unusually well done whether one fully agrees with it or not.

SQUEEZE PLAY!

On July 5 President Roosevelt specifically declined to intervene in the ruling of Selective Service that on and after July 1, 1944, no deferments would be granted for premedical students. In June Dr. Frank Lahey, Chairman of the Directing Board of the Procurement and Assignment Service, had reported to the House of Delegates of the American Medical Association that he had been unable to make any headway toward persuading Government authorities to modify this ruling. He had placed before them all the facts relating to the numbers of students enrolling in medical school annually and the effect of the ruling on medical schools and the future supply of physicians for the United States.

Most medical schools are dependent, in greater or lesser degree, on receipts from students for a palpable portion of their budgets. Denying to them most of their accessions with the exception of women and 4-F's, as this ruling does, poses serious problems and dangers to the medical schools. They have the option of reducing their standards of admission—now at a high level through the efforts of many painful years—to a level low enough to maintain their classes; or of maintaining their standards, with the supply of physicians throughout the country suffering a material reduction by 1948, and with the inevitable result, so far as many schools are concerned, either of closing their doors because of the lack of support or seeking other means of maintaining their budgets.

This latter point suggests the danger that the medical schools will be thrown upon Government for support with inevitable Governmental controls.

Editorializes the *Journal of the American Medical Association*:* "Granted that the premedical students involved will not become available as physicians until 1948, starting now and continuing until the war is over, students will commence premedical studies in utterly inadequate numbers. These lost premedical months or years cannot be regained after the war is over."

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* J. A. M. A., 1944, **125**, 790.

Recent announcements in the press from the Army and Navy indicate that these forces have nearly attained their full projected size now, and from here on will need men chiefly in numbers sufficient for replacements. It appears silly to this writer to say that under these circumstances the Army and Navy and the war effort depend upon the paltry five or six thousand persons per year to be kept out of medical schools.

It is further the opinion of this writer that this move is of a piece with the whole pattern of development of Governmental control of medical training, supply and practice, which the present administration has assiduously pursued. The position of the President in this particular instance seems scarcely defensible from any point of view.

H. P. R.

In and Out of Focus

BY THE OBSERVER

The A. M. A. Session

Your Observer attended the annual meeting of the American Medical Association at Chicago in June. He anticipated a history-making session of the House of Delegates, for never in its existence had it been confronted with issues of such far-reaching significance to medicine. Although the session fell short of his expectations, there were bright spots.

One of these was the address made by the retiring President, Dr. James E. Paullin of Atlanta. Another was the election of Dr. Roger I. Lee of Boston as President-elect. Dr. Lee is undoubtedly one of the ablest physicians elected to high office in the Association.

As has been stated in this column many times, impending changes in medical practice demand dynamic and farsighted leadership. Too often in the past the President has merely been a "front" for the Association. He should be much more than that. He should be its spokesman. It is confidently expected that Dr. Lee will give the wise and courageous leadership of which he is capable.

The House displayed its confidence in the Council on Medical Care and Public Relations by giving it unstinted support. The Council, which has opened a Washington office, presented an ambitious program. Included were plans to stimulate experimentation by medical societies with new methods of providing medical care. If the Council succeeds in doing this without too much delay, it will have more than justified its existence.

Physicians of this country can well be proud of the Association's achievements. However, like all organizations, there are flaws in its record. For example, it has been none too successful in gauging social trends and public opinion. There were indications at the June meeting of a growing realization of this fact. This is a hopeful sign and one which holds promise for the future.

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A Statesman-like Statement

Most men grow in high office. Those who do not are prone to become progressively more Conservative and insistent upon maintaining the status quo.

Dr. James E. Paullin, Past President of the American Medical Association, grew in stature during his term of office. Not one to indulge in wishful thinking, he approached medical problems of the day with an open mind.

Many favorable comments were heard following Dr. Paullin's appearance before the last session of the House of Delegates. In the course of his address he said:

> "The medical profession has never desired to remain static in any of its efforts or accomplishments; particularly is this true at a time such as this, when the entire world is in a turmoil and chaotic conditions prevail among all nations as well as our own. Problems of medical care are fundamental to the reconstruction and rehabilitation of our nation. Necessary changes must occur in the distribution of medical care to make it more generally and easily available and at a lower cost without the slightest diminution in quality. The medical profession must take the lead in constructively planning these evolutionary changes. The recent survey of public opinion made for the National Physicians Committee has made clear that what the people want most is a better distribution of medical service at a lower cost. The question of sickness insurance on a compulsory or on a voluntary basis is one of the great problems which must be considered as a means of reaching this end. Conceivably the Federal government might wish to encourage compulsory sickness insurance by offering subsidies to states in which such programs are developed, and it is also conceivable that Federal aid might become available for the encouragement and expansion of voluntary insurance plans. The rapid increase in the numbers of those who are insured against hospital costs, medical costs, accidental injury and sickness is evidence that the American people still desire to express their own independence and provide care for themselves. Industry has developed its own type of prepayment insurance against the cost of medical care by furnishing hospitalization and medical service supplied by physicians on a full time basis. With these methods and other proposals which undoubtedly will develop there is brought up for consideration many questions of policy which can be met only by adequate consideration by the governing body of this Association."

Dr. Paullin concludes his address with a plea for unity. He says:

> "During the past year it has been observed that in attempting to present the point of view, as established by the House of Delegates, to many governmental agencies we have been met with the statement that the American Medical Association does not speak for the medical profession of the United States. The reason for this is that some state medical associations have been active in presenting to the public points of view opposed to the policies previously established by the House of Delegates. If the ethical principles and conditions of practice established by the House of Delegates are to be successfully supported, state and county medical societies should bring their differences here for discussion rather than place them before the public. In times such as this it is only by the development of complete unity and support that the views of the medical profession, which have been developed for the best interests of the public and for the advancement of medical science, can be made to prevail. If the purposes and ideals and desires for which we as a medical profession stand are worth while, then there should be the loyal support of every member of all organizations to see that they prevail."

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Troubled by Criticism It seems to your Observer that Dr. Herman L. Kretschmer, President of the American Medical Association, has been over-sensitive to criticism of the A. M. A. In refuting such criticism his impatience has been obvious. For example, in his address to the House of Delegates of the Association at its recent meeting he said:

> "Occasionally one hears criticism of some action or failure of action by the Association. I listen patiently, then I always ask this question: 'Have you gone through the home of the Association and seen for yourselves whether or not you have been reliably informed?' Only too frequently, I am sorry to say, the answer is 'No, I have not.' I would strongly urge every member of this House of Delegates to pay a visit to the headquarters office. I am sure you will be well repaid for your time and effort."

Your Observer feels that it is highly desirable for every member to visit the headquarters of the A. M. A. For here the doctor will learn that the staff is highly efficient and doing an undeniably fine job. But the criticism of which Dr. Kretschmer complains has little to do with the kind of work done at headquarters. It goes far deeper than that. It has to do with policies or lack of policies for which the House of Delegates is responsible.

Dr. Kretschmer would lead his hearers to believe that everything that the Association has done is perfect which, of course, it is not. The Association is not infallible and it has made many mistakes.

Dr. Kretschmer says, "One hears much loose talk to the effect that the medical profession is 'in bad' with the public. I have always thought this an old bromide. As a matter of fact, in the first issue of the *Transactions* of the American Medical Association, in 1847, there appears a similar statement with reference to our poor status with the public due to certain practitioners of medicine and that this should be corrected. Much of this loose talk, in my opinion, is in the nature of what may be called a 'smear campaign.' I have always maintained that, except for the smearers, American medicine stands supreme with the vast majority of the people of this country."

One could hardly call Dr. Kretschmer's statement, that people who do not see eye to eye with the Association are "smearers," good public relations. The truth is there has been considerable criticism of the Association by the public. Anyone as informed as Dr. Kretschmer who refuses to admit this is doing wishful thinking.

Dr. Kretschmer then refers to trends in legislation which do not bode well for the medical profession. He says:

> "I believe it is incumbent on every physician in this country to devote at least two hours a day to educating the people in his community as to the significance of such legislation, which would result in the deterioration of medical service, limitation in the choice of the physician and increased taxes. I believe every physician in this country is in a position to do educational work along this line. I do not believe that this problem can be solved by 'letting George do it.' A program of education beginning at the grass roots, with the patient and his physician, is one of the most important approaches to the solution of the problem. Once the patient is well informed regarding the problem, the sailing so far as the profession is concerned should be smooth."

Well, this all sounds very fine but the fact is that the greatest need for education in regard to health legislation is among physicians. Most of them are very vague on the subject. Obviously physicians cannot speak intelligently to their patients unless they know what they are talking about. Here is a task not only for the American Medical Association but for every medical organization in this country. Several medical societies including our own have, through their journals, endeavored to keep their members abreast of developments. They have tried to provide readable material on the economic and social phases of medicine. Meetings, too, have been held for the purpose of discussing such matters. But we still have a long way to go, and the hour is late.

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"I Cannot Resist . . ." It is the exception rather than the rule when Vice Admiral Ross T. McIntire, Surgeon General of the United States Navy, omits from his current public remarks reference to postwar medicine. He is a serious, sound and realistic thinker on this subject. He is also a friend of the medical profession and is anxious that it assert its leadership now when plans for the years to come should be formulated.

Speaking before the War Meeting of the American Medical Association on June 14, Dr. McIntire concluded his address with these remarks:

> ". . . Perhaps I should close at this time but I can not resist the opportunity to say a word about postwar medicine. In this day when there is so much unrest throughout the world, the problem of health will loom very large as war leaves the various combat areas. We have been extremely fortunate in our country in that we have not heard the sound of a hostile shot. True, we have had many ships sunk off our shores and war came home to us in a rather startling fashion. We met that challenge, however, and have pushed the enemy well away from our shores. Today the evidence that we see of war is demonstrated by the battle casualties that are filling, and will continue to fill, our hospitals for many months to come. When this war is finally over the millions of men who are fighting your war will come home. While they are on very low pay today, still they are able, through allowances given to their families and what can be done by the services, to see that their dependents have adequate medical care. What about these men and their families when they leave the service? To whom will they turn for medical care? They will turn to you.

> "As I have commented time and again, the problem of medical care—of decent medical care—at a reasonable cost—should rest in the hands of the doctors of this country. I hope they will present a sound plan for medical care that will take into consideration the millions of people in this country who are in the low salaried groups. If there is to be legislation by Congress, why shouldn't we take a decisive role in its drafting and sponsorship, rather than yield to individuals who approach this serious problem from an unrealistic viewpoint? Much is being done by some of your sound and constructive members, but it is my hope that we will not let the months go by without coming out with a very sound plan."

This plea of a man who is sincerely interested in his profession must not go unheeded.

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Deferment for Premedical Students Refused

Despite the warning of medical educators and the medical profession that refusal to defer premedical students may bring about an acute shortage of physicians in the next few years, the Government is adamant in its position. As it now stands no deferments will be granted such students not enrolled by July 1, 1944.

In its issue of July 8, the *Journal of the American Medical Association* said:

> "In January 1944 it seemed that civilian and military needs for doctors would be met reasonably satisfactorily by the arrangement in which the 55 per cent of entering medical school classes would be provided by the Army Specialized Training Program, 25 per cent by the Navy V-12 Program and 20 per cent from civilian sources. In the past six months this program has rapidly deteriorated. Today medical educators and the medical profession of the country refuse to accept the responsibility for the acute shortage of medical care which will threaten this country within a few years if current regulations and policies persist. The responsibility must rest with the armed forces, the Selective Service System, the President and the Congress of the United States.
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> "In February the Army drastically curtailed the Army Specialized Training Program and has since renegotiated its contracts with medical schools to provide 28 per cent of the 1945 entering classes instead of 55 per cent, increasing to 47 per cent the numbers medical schools must obtain from civilian sources.
>
> "In April the Selective Service System abolished all further occupational deferments of premedical and medical students not enrolled in medical schools by July 1, 1944. As a consequence, it was estimated that the entering classes of 1945 would be reduced 25 to 30 per cent.
>
> "The threat to medical care entailed in these policies was pointed out to General Hershey, the Secretaries of War and the Navy, the President and others, with the suggestions that the situation could be met by (a) reinstitution of the inactive reserves by the Army and Navy, which functioned well for a year, and/or (b) an appropriate Selective Service adjustment, which was definitely a second best arrangement.
>
> "The Army and Navy rejected the first alternative as an evasion of the Selective Service law, and the Selective Service System rejected the alternate proposal because of the acute need of the Army for young men. The needs for medical care were considered to be subordinate to the needs of the fighting forces."

The House of Delegates of the A. M. A. at its meeting in June, disturbed over this situation, adopted the following resolution:

> "Whereas, The present policy of the Army and the Selective Service System in preventing the enrolment of a sufficient number of qualified medical students will inevitably result in an overall shortage of qualified physicians, with imminent danger to the health and well being of our citizens; therefore be it
>
> "*Resolved*, That it is imperative that immediate action be taken by the President or the Congress of the United States to correct the current drastic regulations which result in a restriction of the number of students qualified to enter the courses of medical instruction in approved medical schools."

This resolution was sent to the President, the Secretaries of War and the Navy, the Selective Service System and the members of the House and Senate Military Affairs committees.

On July 2, President Roosevelt declined to relax the Selective Service regulations and grant further exemptions to premedical students. In a letter to Representative A. L. Miller of Nebraska, who, by the way, is a physician, Mr. Roosevelt said:

> "No one is more keenly conscious than I am of the need of maintaining the health of the Nation and of making sure that we have an adequate supply of doctors.

But in this war the need of the armed forces for young, vigorous men must also be given thorough consideration. The Army and the Navy have presented that need in urgent terms as essential to the winning of the war.

"The Inter-Agency Committee on Deferments, which was formed some months ago to advise the Director of Selective Service on deferment of men under 26, gave careful consideration to the case of premedical students. The Committee included representatives of all governmental agencies interested in manpower. I am told that this Committee recommended that there be no deferment for premedical students who are not in medical school by July 1 of this year.

"The Committee, I am advised, took into account the fact that none of these premedical students could be of service in the practice of medicine prior to 1948, and that many of them would never practice medicine. The committee also gave attention to the fact that young men who do not come up to the exacting physical standards of the armed forces, as well as young women, are available to become premedical students.

"As for the future supply of doctors, we must always bear in mind the ex-service men, a considerable number of whom will unquestionably desire to begin the study of medicine.

"As you know, there are many young men who have served their country in the armed forces and have already been discharged from further service. These men, and the far larger number later to be demobilized, must be given every opportunity in the way of education and training.

"I am told that the medical colleges are particularly interested in promoting medical education of well-qualified ex-service men. This plan by the medical colleges in behalf of ex-service men has my hearty support.

"For these reasons, after thorough consideration, I am unwilling to overrule the recommendation of the Inter-Agency Committee on Deferments in regard to premedical students or to instruct the Director of Selective Service to rescind the ruling that he made when he adopted the Committee's recommendations."

As this is written, no further action has been taken by any of the interested groups. However, it is interesting to note that Paul V. McNutt, Administrator, Federal Security Agency, appearing before the Senate Subcommittee on Wartime Health and Education in July, stated that in his opinion the action taken with regard to the deferment of premedical students was a serious mistake and suggested the possibility that it may be reconsidered.

Dr. Parran Visualizes a Partnership

Another speaker at the last annual session of the American Medical Association was Dr. Thomas Parran, Surgeon General of the United States Public Health Service. Dr. Parran said:

". . . In planning for national health, complete medical services of the highest possible quality should be made available to all the people. This problem is so fraught with complications that the vision of both those who desire a complete medical care program and those who oppose it has been obscured.

"The distribution of medical personnel of all categories has also for a long time been a problem in this country. War has accentuated that problem. It would seem to me that when our doctors return from the war, we shall have an opportunity, never before presented us—and one which we hope will not come again in our lifetime—to help medical men to relocate in areas where they are most needed.

"In the last analysis, we physicians must answer the public demand for complete medical and health service. In making that demand, the public should be able to say, as Mr. Churchill recently put it, 'We claim the loyal and active aid of the whole medical profession.'

"I do not believe that all phases of a national health program require Federal financial support. The Government should supplement state and local action; the full participation of the professions, the hospitals, foundations, and voluntary organizations must be the basis of any national health program. Out of my experience, I can visualize a partnership between Federal, state and local governments and the professional and voluntary groups concerned."

"It is time, therefore, that leaders in medicine take greater responsibility for stimulating thought and guiding democratic action to achieve a satisfactory solution of the dilemma. If physicians do not take the initiative and discuss the problem rationally with others concerned, with the intention of solving it, they may find that representatives of the public have handed them a program to execute, and one which is not at all to their liking. Such was the case in New Zealand, and there the difficulties have not as yet been entirely resolved.

"Group discussion of the whole complicated problem should lead to mutually satisfying answers. Hearings on legislation now before the Congress would afford an opportunity for all groups to present their views, with the result, it is hoped, that a sound and comprehensive program would be evolved."

Your Observer has long felt that the relationship between doctors and public officials should be such that where matters of a medical nature are concerned they would work together on a friendly coöperative basis toward one objective, the solution of the Nation's health problems.

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What Is Socialized Medicine?

There is no term so loosely used by physicians as "socialized medicine." This is undoubtedly due to the confusion which exists in the minds of doctors as to just what it means. Usually they have "state medicine" in mind.

Webster defines socialize "to adapt to social needs or uses." This is only one of the definitions given but it is a preferred one. It does not necessarily follow, therefore, that socialized medicine is state controlled or operated. It may be socialized by physicians themselves as has been the case where prepayment medical service plans have been undertaken. The same is true of coöperatives of various sorts. Clinic practice is also a form of socialized medicine.

So when doctors speak of socialized medicine they should be explicit. What they are objecting to in opposing the Wagner-Murray-Dingell Bill is Government-controlled medicine. That term might well be substituted for the commonly used "socialized medicine."

★

G. I. Bill of Rights

A considerable number of physicians from Washington have indicated their desire for postgraduate training upon their return to civilian life. Undoubtedly most of them have read the recently enacted Servicemen's Readjustment Act of 1944 which was approved by the President on June 22. However, there is a chance that some may not have informed themselves in regard to this legislation and a brief review of its provisions as it relates to education of veterans may be worth while.

To begin with, individuals eligible for educational benefits must have served in active military or naval service on or after September 16, 1940 for ninety or more days or must have been released or discharged from active service by reason of actual service-incurred injury or disability. The law provides that "the 90 days of required service must be in addition to (a) any period in which the person was assigned for a course of educational training under the Army specialized training program or the Navy college training program which course was a continuation of his civilian course and was pursued to completion; or (b) any period served as a cadet or midshipman at one of the service academies."

Any veteran eligible for training over 25 years of age has to prove that his education or training was "impeded, delayed, interrupted or interfered with by reason of his entrance into service" before he can qualify for additional education or training. Veterans under 25 years are not required to submit such proof.

The law also specifies that whatever course the veteran wishes to take must be "initiated not less than two years after either the date of the veteran's discharge or the end of the war, whichever is later." An application which is made later than seven years following the end of the war will be rejected.

As to the extent of the education or training available, the veteran is entitled to a refresher or retraining course for a period of one year or the equivalent thereof in continuous part-time study. When he has completed a one-year course, other than a refresher or retraining course, the veteran is then entitled to additional courses not to exceed the time he has been in the service in the armed forces after September 16, 1940, and before the end of the war exclusive of any period he was assigned to any course of education or training under the Army specialized training program or the Navy college training program. The total period of his education or training may not exceed four years.

In regard to the choice of the educational institutions the veteran may select any approved school which will agree to accept him. If for any reason he decides to change a course of instruction, authorization of the Administrator of Veterans Affairs must be obtained.

Schools are chosen by the Administrator. Educational and training institutions coming under provisions of the Act are also defined. These include scientific and technical institutions.

In regard to the payment for the veteran's training, the Government will pay the customary tuition fee, such as laboratory, health, infirmary and other similar fees as are customarily charged. It will also pay for books, supplies, equipment, etc., but the payment shall not exceed to any veteran the sum of $500.00 a year. While he is enrolled, the veteran will be paid a subsistence allowance of $50.00 a month.

These, then, are the principal provisions in the G. I. Bill of Rights for the education and training of veterans.

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Republicans on Medical Care

One of the planks in the Republican platform adopted at Chicago relates to the extension of Social Security benefits. Physicians will be particularly interested in the reference to medical care.

Under the caption "Security" Republicans pledge support to the following program:

"1. Extension of the existing old-age insurance and unemployment insurance systems to all employes not already covered.

"2. The return of the public employment-office system to the states at the earliest possible time financed as before Pearl Harbor.

"3. A careful study of Federal-State programs for maternal and child health, dependent children and assistance to the blind with a view to strengthening these programs.

"4. The continuation of these and other programs relating to health, and the stimulation by Federal aid of state plans to make medical and hospital service available to those in need without disturbing doctor-patient relationship or socializing medicine.

"5. The stimulation of state and local plans to provide decent low-cost housing properly financed by the Federal Housing Administration or otherwise, when such housing cannot be supplied or financed by private sources."

REPORT OF THE DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION

Pursuant to instructions, your Delegate presented at the meeting of the House of Delegates the following proposed amendments to Chapter XII, Sections 2 and 3 of the By-laws of the American Medical Association:

"Section 2 of Chapter XII of the By-laws of the American Medical Association is hereby amended by the addition thereto of the following proviso:
"PROVIDED further, however, that an Associate member of the Medical Society of the District of Columbia, who is otherwise qualified under the By-laws of the American Medical Association, who on the prescribed form shall apply for Fellowship and subscribe to *The Journal* paying the annual Fellowship dues for the current year, shall be inducted into the Association as a Fellow unless the application is disapproved by the Judicial Council.

"Section 3 of Chapter XII of the By-laws of the American Medical Association is hereby amended by the addition thereto of the following proviso:
"PROVIDED further, however, that Associate membership in the Medical Society of the District of Columbia shall constitute membership within the meaning of this Section."

A statement was made at the time of presentation that this amendment would make it possible for a number of physicians in Washington who hold administrative positions and who are not licensed to practice medicine, hence unable to qualify as Active Members of the Medical Society of the District of Columbia, to become Fellows of the Association.

Upon motion, this amendment was referred to the Reference Committee on Amendments to the Constitution and By-laws, of which Drs. Raymond L. Zech of Washington, L. G. Christian of Michigan, Harry Paryzek of Ohio, Walter E. Vest of West Virginia and Charles E. Nongan of Massachusetts were members. Your Delegate appeared before this Committee in support of the amendment stating the action of the Medical Society of the District of Columbia in proposing the amendment was totally unselfish, the benefits that would be derived would be to the individual doctor now outside of the fold, and above all, to the American Medical Association, in its gaining of Fellows who would lend prestige to the Association.

It is of interest that a somewhat similar amendment was proposed by Dr. A. W. Adson, member of the Council on Medical Service and Public Relations. Dr. Adson's proposal would make physicians employed by the Veterans Bureau who were shown to have the necessary general qualifications but who from their position had lost contact with any constituent society eligible for Fellowship.

The Committee after deliberation recommended to the House of Delegates that both the amendments as proposed be submitted to the Board of Trustees. The recommendation was adopted. Sentiment of the Committee seemed to be generally that of approval. It was promised that support would be given the proposals before the Board of Trustees.

Your Delegate was instructed also to support any measure introduced which would limit the activities of Dr. Morris Fishbein to his duties as Editor of the *Journal of the American Medical Association,* placing the Society on record as being opposed to his being spokesman for the A. M. A.

The delegation from California, eight in number, presented through Lt. Commander Dwight L. Wilbur, M.C., U.S.N.R., San Francisco, a series of resolutions.* Included were the following:

1. To grant to Dr. Olin West an Emeritus status.
2. To discontinue all services of Dr. Morris Fishbein as now are rendered to the A.M.A., including his retirement from editorship of the Journal.

The resolution concerning Dr. Fishbein resulted in considerable discussion. A motion was placed before the House that ballots be used in voting. This motion was lost. A standing vote for acceptance of the California resolution concerning Dr. Fishbein was supported by nine votes; some 140 votes were adverse.

Dr. Fishbein was given the privilege of the floor. He gave a brief summary of his connection with the A. M. A. during 31 years.

Your representative in the House of Delegates voted with the majority as he did not believe that the Medical Society of the District of Columbia wished Dr. Fishbein's services as Editor discontinued.

Support was given the proposed change in the Constitution of the A. M. A. introduced by the Delegate from South Carolina which would give the minimal representation of two delegates to any state. Appearance was made before the Reference Committee on Amendments to the Constitution and By-laws. This Committee voted to disapprove the measure and this decision was accepted by the House of Delegates.

Granting of Distinguished Service Medal

Three names were proposed for this honor: Drs. Isaac A. Abt, Chicago, Illinois; George Dock, Los Angeles, California, and Simon Flexner, New York, York.

To show how close was the sentiment and support of these three men, I give the results of the voting: the first ballot resulted in 52 votes for Dr. Dock, 52 for Dr. Flexner, and 49 for Dr. Abt. As there was no majority vote, the contest was continued between Drs. Dock and Flexner, Dr. Dock receiving a majority of votes.

New Member on Board of Trustees

Dr. Louis Hopewell Bauer, an Associate Member of the Medical Society of the District of Columbia from 1928 to 1931, was elected to the Board of Trustees to succeed Dr. Roger I. Lee of Boston. Dr. Bauer was an officer in the Medical Corps, U.S. Army, from 1913 to 1926, and at the time of his membership in the Society was Medical Director of Aeronautics, Department of Commerce. He is now practicing in Hempstead, Long Island, New York. Dr. Bauer's term is for five years, expiring in 1949.

Dr. Roger I. Lee was unanimously made President-elect.

Dr. Bauer completed a term of office as Chairman of the Council on Medical Service and Public Relations, just prior to his election as Trustee.

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* House of Delegates in the Executive Session.

NATIONAL PHYSICIANS COMMITTEE

The House of Delegates of the A. M. A. continues to approve the activities of the National Physicians Committee for the extension of medical service.

The Council on Medical Service and Public Relations deemed it not necessary to follow instructions to further poll the country relative to the public attitude, accepting the data obtained by the Opinion Research Corporation, Inc. of Princeton, New Jersey for the National Physicians Committee. The following are the Committee's summary of conclusions based on its study:

> "The case is crystal clear. Its meaning and the implications cannot be ignored.
>
> "The American People want none of the National Government's meddling in the vital field of medical service.
>
> "The American People understand and believe in our effective system of personalized medical care.
>
> "There is an economic problem involved. To some people the prospect of emergency need, unusual or prolonged illness, is a source of fear and of worry.
>
> "The American People know about and desire—demand—a plan or plans—a method for the prepayment of medical care costs. This demand must be met.
>
> "It is not exclusively a medical responsibility. It is an economic problem.
>
> "Equally involved in the final settlement are all of the Professions, the Insurance Companies, American Labor, all of Business and all of Industry.
>
> "Methods have been devised—mechanisms have been perfected. Plans have been tested. They are satisfactory to a previously unbelievable extent. They are adequate to the need. The period of experimenting is at an end."

Much printed material concerning the survey was furnished each Delegate.

NATIONAL MEDICAL ASSOCIATION

Resolutions from this National body of negro physicians were brought before the House of Delegates. In effect if adopted, the members of this organization would become Associate Fellows of the A. M. A. These resolutions were not adopted.

CHILDREN'S BUREAU

Attention might be called to a supplementary report of the Council on Medical Service and Public Relations which was presented at the Chicago meeting. Quotations from a publication of the Children's Bureau, "Maintaining Well Baby Clinics in Every Community," showing trends in the present Administration, follow:

> " 'They (the clinics) are of value not only to families in economic need but to all parents, who wisely take advantage of the help they offer in keeping well babies well.'
>
> " 'The service that the mother receives in a child-health conference is more than she can get in the usual office visit to a doctor.'
>
> " 'It is particularly necessary at this time that enough of these well-baby clinics be made available in all communities . . . because the E.M.I.C. program . . . will rely on child health conferences for the health supervision of these babies.'
>
> " 'To insist that clinics be open to all mothers who seek this service free of charge.'
>
> " 'Mothers are to be admitted without investigation of income'."

SOCIETY MEMBERS IN ATTENDANCE

The following members of the Medical Society of the District of Columbia were present at the Chicago session, some of whom attended meetings of the House of Delegates:

Abarbanel, A. R.
Anderson, Harry Ford
Baber, John M.
Ballinger, Wm. M.
Boyd, James I.
Choisser, Roger M.
Clark, Wm. Earl
Conklin, Coursen B.
Culver, Cyrus W.
Davis, David
Dewey, George
Dunn, W. LeRoy
Eichenlaub, F. J.
Freeman, Walter
Grant, David N. W. (Honorary)
Halley, Charles M.
Harvey, Verne K.
Heiges, Lynwood
Herbst, Wm. P.
Hertzberg, H.
Hess, Valentine
Hunter, Oscar B.
Ireland, M. W. (Honorary)
Kain, H. Gladys
Kaiser, Paula R.
Kanof, Naomi M.
Katzman, Sollie
Keliher, Thomas F.
Kittredge, Elizabeth
Kotz, J.
Lyon, James Alexander
McGrath, R. Sterling
McLendon, P. A.
McNitt, Arnold
Marbury, Wm. B.
Mattingly, Richard V.
Meredith, Richard H.
Nicholson, Margaret M.
Orem, John M.
Overholser, Winfred
Parran, Thomas (Honorary)
Peabody, J. Winthrop
Protas, Maurice
Ramsey, Herbert P.
Rowntree, Leonard G.
Scala, Norman P.
Sexton, Roy L.
Sullivan, John C.
Teichmann, Walter O.
Wall, Joseph S.
Walsh, Bernard J.
Walton, Harold M.
Warfield, J. Ogle
Wells, R. Lomax
Whitmore, Eugene R.

Your Delegate feels that the membership generally should make every effort to be present at sessions of the House of Delegates when at all possible. It should be known that even in Executive Sessions action is usually taken permitting Fellows to attend upon recommendation by a member of the House.

COURSEN B. CONKLIN, M.D.
Delegate to the House of Delegates from the
Medical Society of the District of Columbia

War Section

OUR HONOR ROLL

Since publication of the April issue of the Medical Annals, our Honor Roll of members in the armed services has been increased to include the following physicians: Abe Blajwas, Thomas A. Christensen, Louis Eugene Daily, Edmund F. Daley, John F. Donohue, Harold Y. Finck, William J. P. Howard, John A. Kennedy, Eugene L. Lyddane, Bernard E. Nunez, John A. O'Donoghue, James A. O'Keeffe, Mortimer Ostow, Jed Williams Pearson, Jr., Samuel J. Sugar, Alfred J. Suraci, Robert G. Taylor and G. Louis Weller, Jr.

Frequent promotions in rank indicate the splendid service our physicians are rendering both in this country and abroad. The Editorial Board is pleased to list the following members of our Society who have recently received such recognition:

Warren B. Burch, from First Lieutenant to Captain
Arthur Dick, from Major to Lieutenant Colonel
John F. Dominick, from Major to Lieutenant Colonel
Mervin W. Glover, from Captain to Major
J. Phelps Hand, from First Lieutenant to Captain
Raymond T. Holden, from Lieutenant Commander to Commander
Richard L. Jackson, from Captain to Major
Benjamin P. Lafsky, from Captain to Major
Zigmond M. Lebensohn, from Lieutenant to Lieutenant Commander
Leslie K. MacClatchie, from Lieutenant Commander to Commander
Edward C. Morse, from Lieutenant Colonel to Colonel
Benjamin J. Mundell, from Lieutenant to Lieutenant Commander
Ivy A. Pelzman, from Major to Lieutenant Colonel
Clyde P. Reeves, from First Lieutenant to Captain
Hyman D. Shapiro, from Major to Lieutenant Colonel
William G. Sorrell, from Captain to Major
Walter Stokes, from Major to Lieutenant Colonel

MAJOR KELLY AWARDED SILVER STAR

In an order dated May 14, 1944, Headquarters Fourteenth Air Force announced that the Silver Star had been awarded Major Edward A. Kelly, M.C., U.S.A., "for gallantry in action" aboard a bomb-stricken troopship in the Mediterranean Sea on November 26, 1943.

The citation states that Major Kelly, who was assigned to the ship's hospital, "distinguished himself when, after the ship had received a direct hit by an aerial bomb, he administered medical aid to wounded personnel under risk to his own life. The bomb had smashed the ship's dispensary and he engaged in giving aid to the wounded on the decks, despite confusion and pandemonium caused by the explosion and the resulting fire, smoke and escaping steam. As the ship began to list he carried many wounded men from starboard to port side, inflated their life belts and lowered them into the water by means of ropes. He continued to work until practically all living personnel were evacuated. Major Kelly was taken into a lifeboat after four hours in the water, and in the lifeboat rendered medical aid to wounded there and helped load them aboard a rescue ship. When he was taken on the rescue ship he resumed the task of giving medical aid and worked steadily until all the wounded were cared for, eleven hours after the troopship had been hit. His absolute devotion to duty in the face of danger and under extremely difficult conditions are consonant with the fine traditions of the American military service."

Upon learning of the award, Major Kelly, who is a modest fellow, said, "I just considered it a routine day's work as a doctor."

Major Kelly has many friends in Washington.

He graduated from Georgetown University School of Medicine in 1934. In July, 1942 he entered the armed forces as First Lieutenant in the Medical Corps. He became an Active Member of the Medical Society of the District of Columbia in July, 1939.

The Washington medical profession is proud of Major Kelly's splendid record in the service of his country.

LETTERS FROM PHYSICIANS IN THE ARMED SERVICES

With this issue of the MEDICAL ANNALS, publication of letters from the physicians in the armed forces is resumed. The reader interest in these communications has been extraordinary. Doctors in the services as well as on the home front have urged that they not be omitted from any issue of the ANNALS.

The Editorial Board desires very much to continue their publication. Whether or not this is possible will depend upon the number of communications received which are of general interest. Medical officers stationed in this country and abroad are assured of an appreciative audience when they write the Secretary or their friends with a view to publication in the ANNALS.

From Major F. D. Suttenfield, c/o Postmaster, New York City:

Dear Uncle Ted: Have just received March ANNALS and read it from cover to cover. It's funny under what diverse circumstances a chap will read "WANT ADS!" To me the editorial policy has greatly improved in the past year or two. Congratulations on the broad comments of "W. O." (who is he?) on juvenile delinquency. The President's Page has some good meat as a rule, the one in the March issue being no exception. While our President is keenly analytical, we as individuals have a tendency to sit by philosophically. I believe we do this because we feel that those of you whom we have chosen to represent us are charged with initiating measures to improve the overall picture, in addition to just writing about it. By "you" I mean every official of medical societies from the top of the A. M. A. down. For example, if the A. M. A. is not keeping abreast the progressive thoughts and demands of a modern society, it is you who can bring it into "focus." If modern society is such as to demand that organized medicine must be represented on Capitol Hill, why must it take a rebellion within to make the A. M. A. see the light and act accordingly? If the practices of present-day physicians are such as to constitute a problem, why not, as our delegated representatives, present the matter to the medical schools (student entrance committees), and insist on more careful selection of students, instead of projecting the problem on the individual physician's shoulders? Few old dogs will change their habits. However, it is within your power to insist on better breeds, if such is in evidence, as our President's March editorial suggests.

Come on over for the "big push"!

From Major B. P. Lafsky, c/o Postmaster, San Francisco, Cal.:

Dear Sir: I am reading your news letters and the MEDICAL ANNALS from cover to cover and want to thank you very much for sending them. The letters from men in the services are very interesting, especially those from other theatres of war.

Captain Eugene Finnegan is in my outfit so I pass on any literature from D. C. to him. He was an intern at Georgetown and Providence Hospitals before entering the service.

From Lt. Colonel Edward Grass, c/o Postmaster, San Francisco, Cal.:

Dear Ted: Hello! This is just a short note compared to your long letter of Feb. 21 just received. The news is really stimulating and thanks. We have just completed a big battle here and the Nips were piled up by our men until bulldozers had to be called to bury them. The smell is terrible and when the wind blows unfavorably gas masks are a good protection. The medics are doing a great job here, and our Division has the lowest malaria & N.P. rate of any troops in these parts. Soon as I hit a rest camp will really write you an interesting letter.

From Captain P. A. Bryant, c/o Postmaster, San Francisco, Cal.:

Dear Mr. Wiprud: I want to thank you for the news letter of April 10. I was indeed glad to see so many names of the service men that had written you. I can see by the APO of those who have written that we are pretty well scattered all over the world. These news letters always give me a lot of pleasure and hope you can continue to send them out.

My ANNALS also come to me way out here in New Caledonia.

The Army-Navy night I'm sure was a great success and I feel sure most of us want you people back home to have more of them.

The idea of building up the medical library is an excellent one and I hope we will have the best in the country.

This letter leaves me in good health and I hope for all the personnel there the best of health also.

From Captain John P. Hand, c/o Postmaster, New York City:

Dear Ted: For two months, now, I have had the good intention of writing you, but these have been busy days for us over here and consequently this is one of the things that has been pushed into the background.

This evening I have just been looking through some of the back copies of the MEDICAL ANNALS and I ran across a letter written to you, in the March issue, by Major Lafsky. His letter impressed me because despite the fact that he is apparently fighting the war on the other side of the world, his experiences sound so much the same as mine. In fact, except for a few minor details, if I were to write the same thing word for word it would be a perfect description of our six months in Bizerte, at a Station Hospital.

The first of the year our hospital moved on to Italy and we set up as a Venereal Disease Treatment Center, much to the disgust of all of us. There was no work for an anesthetist, of course, in such a setup and thereupon I took up my career as an Administrative Officer—serving as Executive Officer. During the six months that I held that post, I learned much about the Army but I was glad to be able finally to return to Anesthesia. I had the opportunity twice during the present push to go up to the front as anesthetist for an emergency surgical relief team to an evacuation hospital. The going was pretty rough up there, because . . . there was a tremendous amount of work to be done. I had the good fortune to run into several Washington men during that time, Captain Frank Threadgill, Major Charlie Musso, Captain Ernie Gould and Leon Gordon's brother, also a Captain. Since returning to the rear echelon, my former outfit has been disbanded and I have had the good fortune to be assigned to this general hospital as chief of the Anesthesia Section. I'm getting a lot of good work here as we are doing a good bit of chest surgery. I have a staff of approximately eight officers or nurse anesthetists—depending upon how busy we are. This is the kind of assignment that I have hoped for ever since I came into the Army almost two years ago. We have been using a great deal of pentothal here with exceptionally good results and almost no trouble. I am working up the figures at present and perhaps later on, with the Army's approval, I'll be able to send an article to the MEDICAL ANNALS.

I have enjoyed your letters very much indeed. They help to keep us informed of what is going on back home. I haven't been in Washington since setting out for Texas and my first assignment in August, 1942. That has been a long time—too long to suit me. I hope that this will soon be over and we'll all be back home.

From Lt. Colonel Arthur Dick, c/o Postmaster, New York City:

My dear Mr. Wiprud: I have received and read with devouring interest the many "newsy" letters you have been dispatching. With a bit of embarrassment because of a belated answer I want to voice my appreciation of getting them and their entertaining albeit nostalgic contents.

Since your last "communique" from home our unit has been transplanted to Italy where socially as well as professionally the improvement over North Africa is remarkably great. Quite naturally the closer to the site of activity the more demand there is on our professional resources and less time available for getting into mischief.

There are many historical places of interest to see and prior to opening our hospital we got around a good deal.

We were fortunate enough to see and hear Mt. Vesuvius at the height of its eruptive fury, the first since 1906, something we were taught in primary schools, but vastly different from actual first-hand observation at close range.

The only Washingtonians I have met overseas are Major Wilner and Captain Hand, both in North Africa.

At present time my duties are manifold. As executive officer of the hospital and chief of the maxillofacial-plastic service I'm kept busy enough. The C.O. has been ill for some time so that I am temporarily the acting C.O. . . .

From Major Edward A. Kelly, c/o Postmaster, New York, N. Y.:

EDITOR'S NOTE: The following letter was addressed to Colonel George L. Ball, Medical Corps of the Army Air Forces. Colonel Ball very kindly gave his permission to publish a portion of Major Kelly's letter to him in the MEDICAL ANNALS. We are sure our readers will agree that this is a highly interesting communication.

Dear George: This last trip from India to China was a "Lulu." I was exactly five weeks on the road and travelled by every known means of travel. Just to give you an idea—seven days by train, two days by paddle-wheel river boat sleeping on the deck, two days by another train, three hours by plane, then the real trip of twelve days by truck over nothing but mountains of the worst kind. We would travel five to eight miles going up a mountain two miles high. Stayed in Chinese Guest Houses on the way—had the best rooms in the house for $80.00 a nite. The beds consisted of two carpenter's horses with two planks across them and no blankets or mattress. Every morning I had two fractured hips and bed sores on both ischial tuberosities and ilial crests. The last four days we ran out of C-rations which was our only food for the entire trip. Two of the last four days we had a cup of tea for our three meals and the last two days we had a cup of hot water. I lost 17 pounds during the trip but am none the worse for it. It was a real experience.

We passed thru some of the most beautiful scenery in the world. Sleeping on top of some mountains 10,000 feet above the earth with clouds all around you and even a few thousand feet below you so you could not see the valleys below. Some of the mountains are sheer rock straight up and down for thousands of feet. Even up the sides and on top are irrigated patches of land with vegetables and rice. Even a space the size of a desk is cultivated in between the rocks. All thru the rocks are corn plantations with some spaces so small that they only hold one plant. The Chinese have surely utilized every available inch of land. . . .

I am going to enjoy my work more here in China because we are actually at the Japs' back door. The 5th Fighters are a bunch of grand people and now that we are in combat, I feel a little closer to them. My one fault is that I have no patience with men who whine all the time and gold brick to get back home. There is a job over here to do that is much bigger than anyone realizes unless you are actually in the outfit. I too would love to be with my family but if I went back now I would never be able to live with myself. I am as happy and contented as possible in such surroundings although I would not care to stay here for four or five years.

On The Home Front

The Chicago Institute for Hospital Administration will be held at the International House at the University of Chicago, September 11–22, under the direction of Dr. Malcolm T. MacEachern, Chicago. Registration will be limited to 100 hospital administrators and assistant administrators. Applications for registration may be made through Dean Conley, Executive Secretary of the American College of Hospital Administrators, 18 East Division, Chicago.

The new Community Blood Plasma Bank, successor to the former Office of Civilian Defense blood bank, has been incorporated and will begin operation soon.

According to Dr. Roger M. Choisser, newly elected President of the Bank, plans are to maintain Bank supplies with contributions by patients after they recover, or by their friends. This is a nonprofit organization and plasma will be available at the cost of production plus a donation of blood. The main donor center will be located at the Police and Fire Clinic, 1018 13th Street, N.W.

Blood will also be available immediately at the main Bank. Hospitals will have the privilege of drawing blood and replacing it later at the convenience of friends and relatives.

The governing board of the new Bank consists of Dr. Choisser; Dr. John A. Reed, Vice President; Fred A. Walker of the Central Labor Union, Secretary-Treasurer; and Drs. Charles Stanley White, Oscar B. Hunter and John M. Orem.

The Joint Committee on Physical Fitness, under the auspices of the Federal Security Agency, met in Washington for a two-day session, July 27 and 28, to formulate a nation-wide program to improve the physical fitness of the people of the country through education, prevention and correction.

National organizations in nearly all fields of endeavor were represented at the meeting. Present from the American Medical Association were Dr. Olin West, General Manager and Secretary, Dr. Morris Fishbein, Editor of the *Journal*, Dr. Carl M. Peterson, Secretary of the Council on Industrial Health, and L. C. Salter of the staff of the *Journal*. Theodore Wiprud, Secretary of the D. C. Medical Society, represented Rotary International.

Colonel Leonard G. Rowntree, Chief of the Medical Division of the Selective Service System and Chairman of the Joint Committee, was largely instrumental in organizing the meeting and presided at a number of sessions. Dr. West was Chairman of the Medical Affiliates Section.

CALENDAR OF MEETINGS

July 6	Joint Meeting, Committee on Medical Care and Lay Advisory Group
July 10	Subcommittee on Diagnostic Clinics
July 22	Section on Pathology
July 24	Executive Board
July 28	Program Committee
July 31	Chairmen of all Committees and Subcommittees

Dr. William Calhoun Stirling, Chairman of the Medical Division, District of Columbia War Finance Committee, has announced that the Medical Division sold $1,067,933 worth of war bonds during the Fifth War Loan Campaign, reaching 107 per cent of their million dollar quota.

The quota for the Medical Division was set according to the number of beds in each of the twelve leading hospitals, with each hospital sponsoring a different project, such as evacuation hospitals, station hospitals, convalescent hospitals, ambulance planes, medical equipment for hospital ships and a pursuit plane.

In commenting on the final bond sales, Dr. Stirling said, "The outstanding job done by the Medical Division in the Fifth War Loan Drive is one of which every member of the profession can be proud."

Serving on the Medical Division of the War Finance Committee with Dr. Stirling were Drs. George J. Brilmyer, Fred A. T Geier Casimir

Leibell, John M. Orem, X. Charles Suraci and J. Russell Verbrycke.

Since the **personnel of the committees appointed by President James N. Greear for 1944–45** appeared in the July issue of the MEDICAL ANNALS, the following substitutions have occurred:

Dr. Charles P. Howze for Dr. Donald Stubbs, as Vice Chairman of the Committee on Radio Education.

Dr. Clarence K. Fraser for Dr. Howard P. Parker, as Chairman of the Subcommittee on Maternal Welfare.

Dr. Floyd S. Rogers for Dr. Richard L. Silvester, as a member of the Subcommittee on Maternal Welfare.

Colonel Stuart O. Foster for Dr. Mathew White Perry, as Chairman of the Committee on Rehabilitation of Service Physicians.

The last named Committee was recently created by the Executive Board. The Woman's Auxiliary Advisory Committee was discontinued. Both of these actions are subject to approval by the Society at its first business meeting in the fall.

The District Office of Price Administration has appointed a **Medical Advisory Committee** to pass on all applications for extra food rations for convalescents and persons in ill health. Dr. Hugh H. Hussey has been named Chairman. Other members of the Committee are Drs. Roy L. Sexton, Roger O'Donnell, Thomas F. Collins and James M. Moser.

Dr. Nelson Mercer, medical officer at Virginia Polytechnic Institute, was appointed by the District Commissioners as Chief Medical Officer of the Tuberculosis Division of **Gallinger Municipal Hospital.** Dr. Mercer will take over the post August 1, succeeding Dr. Charles P. Cake, who resigned to enter the U. S. Public Health Service. A graduate of the Medical College of Virginia in 1914, Dr. Mercer has worked in the field of tuberculosis in municipal, private and public health service hospitals in Richmond, Detroit and Philadelphia.

Dr. William Calhoun Stirling participated in a Symposium on Prostatic Carcinoma at the annual meeting of the American Urological Association in St. Louis, Mo., June 19. The subject of his paper was "Analysis of Forty Cases of Carcinoma of the Prostate."

TO MEMBERS

The Editors of the ANNALS would welcome letters received by members of the Medical Society of the District of Columbia from physicians in the services which are suitable for publication. There is wide interest in such letters. Send them to the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA, 1718 M Street, N.W., Washington 6, D. C.

Dr. Harry F. Dowling, Chairman of the Subcommittee on Diagnostic Clinics, and **Theodore Wiprud,** Secretary of the Society, visited the Johns Hopkins Diagnostic Clinic in Baltimore, August 1.

Dr. Herbert P. Ramsey has been appointed Chairman of the Health Division of the Council of Social Agencies.

Dr. Oscar B. Hunter discussed indications for and against the use of penicillin before the luncheon meeting of the Civitan Club at the Mayflower Hotel, July 25.

Drs. Mario Scandiffio and Russell F. Cahoon have requested the Editorial Board to correct the statement made in the June issue of the ANNALS to the effect that they were continuing their association with Group Health Association on a part-time basis. Both physicians have severed relations with that organization.

Captain John Harper of the Navy Medical Corps has succeeded **Rear Admiral Charles W. O. Bunker** as commanding officer of the National Naval Medical Center, Bethesda, Md. Admiral Bunker, who is now retiring, has served as head of the Center since 1942.

Dr. W. Leroy Dunn has been appointed chief clinician of the Arlington Chest Clinic, succeeding Dr. Charles P. Cake, who resigned July 1.

WILLIAM THORNWALL DAVIS, M.D., F.A.C.S.

(1877–1944)

Dr. William Thornwall Davis, son of William Thornton and Teresa Akin Davis, was born, January 14, 1877 at Little Rock, Arkansas, and died, June 16, 1944 at his home in Washington, D.C. He was a descendant of John Graham of Scotland, who was born in 1511, and of Captain John Worthington, who was with the George Rogers Clark Expedition which captured Kaskaskia in 1778 and Vincennes in 1779. This probably accounts in part for his great patriotism and executive ability.

After receiving his early education at the Kentucky Military Institute he was a page in the United States Senate. In 1901 he graduated from Columbian University, now the George Washington University School of Medicine, and in 1903 from the United States Army Medical School. He was near the top in the graduation lists of both classes. He served under General Leonard Wood in the Moro Campaign of 1904-05 and under General Frank McCoy in the Datto Ali Campaign. While in the service he traveled widely in the Orient and this experience was of great help to him later. In Cuba he had an opportunity to assist with malarial research. For this and for his contributions in medicine, the Cuban Government conferred upon him the Carlos Finlay Decoration.

In 1912 he took Postgraduate courses in Vienna at the Allgemeine Poliklinik.

In World War I he served as a Major in the Medical Corps, resigning from the service to take up the private practise of ophthalmology. His heart, however, remained with the services and he was honored when he was appointed Consultant in Ophthalmology to the Surgeon General of the Army and a member of the Optical Advisory Board of the Army in 1943. He was also appointed Honorary Consultant to the Army Medical Library in 1944. Since our entry into the present war he had taken no vacation, and the load of his official and unofficial efforts, added to an already heavy civilian schedule, contributed largely to his passing. It can truly be said that, although out of uniform, he died in the service of his beloved country.

Dr. Davis was Professor of Ophthalmology at the George Washington University School of Medicine from 1920 until his death. He had a deep interest in his undergraduate and postgraduate teaching and had a rare gift of imparting his knowledge to his students, as well as inspiring them to do careful, honest work. He had no patience with slipshod methods and short cuts that precluded meticulous work. He was President of the George Washington University Medical Society in 1930–31.

CAT.

William Thornwall Davis, M.D.

In 1934 he organized the Washington, D. C. Ophthalmological Society and was its first President. In 1935 he was granted sufficient funds from the Rotary Club for the maintenance of an Orthoptic Clinic, which he established at the Episcopal Eye, Ear and Throat Hospital. He served on the staff of that hospital from 1920 and became a Senior Surgeon in 1924. Dr. Davis was the first in Washington to operate for retinal detachment by diathermic micropuncture, and on the inferior oblique at its insertion.

In 1937 Dr. Davis organized the Postgraduate course in Ophthalmology, Aviation Medicine, Ocular

Surgery, Ocular Pathology and Orthoptics at the George Washington University School of Medicine. These courses, given annually, attracted doctors from Puerto Rico, Cuba, Mexico, Newfoundland, Canada and all of the United States. The onset of World War II prevented their becoming an international institution. These efforts were appreciated by the University and recognized in 1940 by its Award of Achievement. He organized the Annual Meeting of the Department of Ophthalmology of the George Washington University School of Medicine. The first meeting was hold on December 2, 1943.

Dr. Davis' chief interest in ophthalmology was in the diagnosis and treatment of the disturbances of ocular motility. After a careful study of Bielschowsky's works and personal interviews with him, he recognized the importance of the vast knowledge of the man. He took many moving pictures of the vertical disturbances and gave many lectures on this subject. He emphasized the importance of early operation for strabismus in order to obtain a functional cure and to prevent the severe and often permanent psychological complications which may arise in the first school year. He also stressed the importance of the treatment of the general physical condition of children with strabismus and not a few accommodative squints were cured largely by time spent out-of-doors on a farm.

Since his election to Active Membership in the Medical Society of the District of Columbia in 1914, Dr. Davis had devoted considerable time to its program. At the time of his death he was serving on the Committee on War Participation. He contributed generously to many scientific publications, including the *Medical Annals of the District of Columbia.* His last editorial in the *Annals* appeared in the June issue.

Dr. Davis was active in the Southern Medical Association and for some years served as its Councilor for the District of Columbia. He was First Vice President of the Academy of Ophthalmology and Otolaryngology in 1935 and a Fellow of the American College of Surgeons and the American Medical Association. He was on the consultant staffs of Garfield, Columbia, Gallinger and Casualty Hospitals and Glenn Dale Tuberculosis Sanitarium.

He was a member of the Military Order of Foreign Wars of the United States, the Society of the Cincinnati of the State of Virginia, the Military Order of the Moro Campaigns, the Military Order of the Carabao, the Spanish War Veterans, the Rotary Club, Filson Club of Kentucky, Metropolitan, Chevy Chase and Army and Navy Clubs.

Those of us who were privileged to be his associates (he never spoke of us as his assistants) will remember him for his great foresight, his devotion to his country, his profession and his family, his love of nature and quiet simplicity, and his absolute intolerance of indifferent, hurried or careless work. He was always the courteous Southern gentleman; his commands were always requests. In spite of his many acitvities he always had time and was glad to advise and help us with our problems. To him adversity was the opportunity to solve a problem; these problems were often solved in the quiet of his regular early morning walk to the office.

Dr. Davis is survived by his widow, Mrs. Renée Tolson Davis, and four sons, Dr. William J. G. Davis of the Cleveland Clinic; Major Roger Has-Brouck Davis, Air Corp, A.U.S.; First Lieutenant Rene Sheldon Davis in the Rainbow Division; and Akin Thornwall Davis, a premedical student at George Washington University. To these we extend our sympathy in thoughts too deep for words.

"And only the Master shall praise us, and only
the Master shall blame;
And no one shall work for money, and no one
shall work for fame;
But each for the joy of the working, and each
in his separate star,
Shall draw the Thing as he sees It for the God
of Things as They Are."

Ernest Sheppard, M.D.

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *September, 1944* NUMBER 9

CRUVEILHIER-BAUMGARTEN SYNDROME

Report of Two Cases

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Fellow in Medicine, Georgetown University School of Medicine

IN 1942 Armstrong, Adams, Tragerman and Townsend,[1] in a review of the literature and report of 2 additional cases, clarified so far as possible at this time the Cruveilhier-Baumgarten syndrome. They tabulated the pertinent data of 52 previously reported cases and added, in addition to the 2 they described in detail, a further case they found in the autopsy protocols of the Los Angeles County Hospital. Thus there have been 55 cases recorded under this heading.

The term "Cruveilhier-Baumgarten Syndrome" may be applied to patients having a clinical picture of portal hypertension featured by a loud abdominal murmur and frequently a thrill. From the analysis of Armstrong et al it appears that cases presenting the syndrome and having adequate necropsy descriptions can be divided into two large groups and seven subgroups. One of these categories (Group 1 A) includes 6 cases that fulfill the criteria of Cruveilhier and Baumgarten as instances of congenital patency of the umbilical vein and atrophy of the liver with little or no cirrhosis and splenomegaly. This combination is designated "Cruveilhier-Baumgarten disease" (in contrast with "syndrome"). In other words, congenital patency of the umbilical vein either alone (as adduced by Cruveilhier in 1833–35) or associated with congenital hypoplasia of the portal system (as hypothecated by Baumgarten in 1908) may constitute an individual disease entity. Any other disease, however, that results in portal hypertension and happens to utilize umbilical collaterals excessively may produce a very similar clinical picture (Cruveilhier-Baumgarten syndrome).

"The development of the umbilical veins is closely related to the development of the portal system. In the early embryo the umbilical and vitelline veins are paired vessels and empty into the sinus venosus. As the liver parenchyma begins to form in the tissue of the septum transversum, there is interposed between these veins and the sinus venosus (later to form the atrium of the heart) a series of sinusoidal veins within the liver. These veins are formed by branching of the left umbilical and vitelline veins. The left umbilical vein also maintains a direct connection with the sinus venosus by means of the ductus venosus. The right umbilical vein disappears early. As the capillaries of the liver develop into their final state, the adult portal vein is developed from the vitelline veins and the left umbilical vein empties into the left branch of the portal vein and contributes to the sinusoids in the left lobe of the liver. Before birth most of the placental blood is shunted directly from the left umbilical vein to the atrium of the heart through the ductus venosus . . . Baumgarten suggested that a congenital failure of the portal tree to develop would maintain umbilical vein patency and initiate the changes seen at autopsy, and be responsible for the clinical picture which the patients presented."

"After birth and ligation of the umbilical cord, the umbilical vein atrophies to form the ligamentum teres within the falciform ligament, which process occurs within two months following birth, and the ductus venosus forms the ligamentum venosum. However, the upper portion of the umbilical vein remains patent into adult life as the Rest-Kanal of Baumgarten . . . Normally there is no communication between the umbilical and the epigastric veins in the abdominal wall. The vestigial remnants of the retrogressive changes in the umbilical vein have no functional significance unless some disease process leading to portal hypertension invokes the development of all available collateral channels."

Armstrong et al further discuss the various reported means of utilization of the umbilical vein in portal collateral circulation as well as the more usual connections through the paraumbilical veins.

In the diagnosis the murmur and thrill are of most importance. They are most intense in the umbilical or epigastric regions and are generally continuous. The murmur has been described as a venous murmur, a hum, a roar, a "mill-like" murmur, a hollow spinning-wheel sound and a grinding sound. Armstrong et al state that the production of the murmur probably depends on the passage of blood to an area of different caliber or direction, the eddying of current in a blind dilated venous sac or pouch, or the flowing of the blood through constrictions in the course of a dilated and tortuous vein.

The categories into which Armstrong et al have divided the 25 cases that were reported with adequate necropsy data are as follows:

I. Patency of the umbilical vein itself:
   A. Associated with the other clinical and pathologic findings as described by Cruveilhier and Baumgarten (6 cases)
   B. Associated with some independent disease of the liver or portal system resulting in portal hypertension, viz.:
      1. Advanced portal cirrhosis (6 cases)
      2. Anomaly or occlusion of the hepatic veins (2 cases).
II. Cases in which there is some disease of the liver or portal system resulting in portal hypertension in which collateral circulation through the umbilical area apart from the umbilical vein plays a prominent role.
   A. Cases of portal cirrhosis of the liver associated with unusually prominent paraumbilical veins (7 cases)
   B. Excessively prominent paraumbilical veins with portal hypertension other than cirrhosis of the liver (1 case)
   C. Patency of other collaterals in the umbilical area in association with cirrhosis or other causes of portal hypertension (3 cases).

REPORT OF CASES

Case 1.—Mrs. J. B., a 53-year-old white woman, was admitted to the Georgetown University Hospital on March 23, 1944 in coma. Her son stated that she had been perfectly well until 4 days before, when she became nauseated and vomited following the eating of "bad meat." The following day she had some bloody stools and the vomiting became so severe that by night she was so weak she could hardly raise herself in bed. A physician prescribed an opium and belladonna mixture the next day, and on the day before admission the patient took 0.2 Gm. (3 grains) of nembutal and gradually sank into a stupor from which she could not be aroused. Five hours later she was brought to the Hospital.

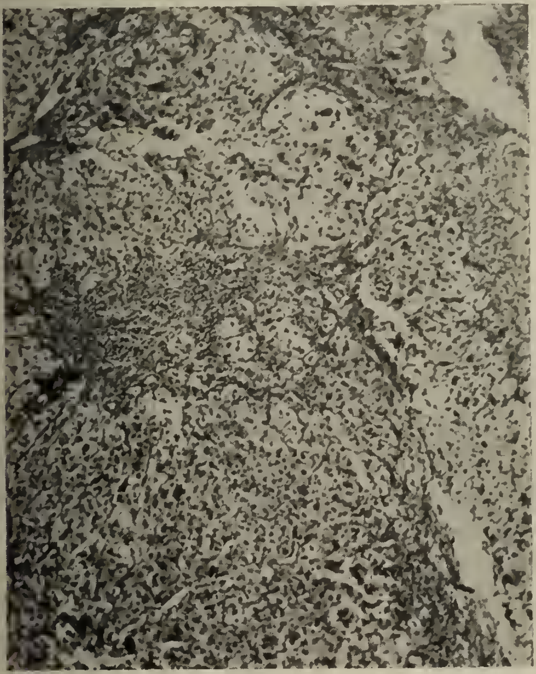

Fig. 1. Case 1. Photomicrograph of liver biopsy specimen reduced from a magnification of 100 times.

Physical examination revealed a well developed, fairly well nourished woman in deep coma. There was no evidence of trauma, and the neck was not stiff. Respiration was slow, regular and noisy but not stertorous. The pupils were equal and reacted sluggishly to light. The Babinski reaction was positive bilaterally, and there was almost complete absence of the deep reflexes. Both arms were held tightly to the sides and felt spastic on passive motion. Heart, lungs, abdomen and pelvis were thought to be normal. The heart rate was 80 per minute, and the blood pressure was 90 systolic and 60 diastolic.

Laboratory tests performed immediately showed the urine to be normal except for a trace of albumin; the hemoglobin to be 85 per cent, the red blood cells to number 4,380,000 per cu. mm. of blood, and the white blood cell count to be 12,800 with a normal differential count; the blood sugar to be 125 mg. per cent; and the blood urea nitrogen to be 6.9 mg. per cent, and the nonprotein nitrogen 42.5 mg.

The patient was thought to be suffering from barbiturate poisoning and dehydration and was treated accordingly. Within 6 hours she began to react to stimuli; within 12 hours she was able to talk, and in 24 hours she was lucid and able to give a full history. She stated that 3 years previously she had been operated on at another hospital because of jaundice, clay-colored stools and dark urine of 2 weeks' duration. The hospital record showed that the laboratory data suggested extrahepatic obstructive jaundice; however, an exploratory laparotomy revealed a normal gall-bladder and bile ducts, but a small nodular liver from which a biopsy specimen was removed. Pathologic report of this specimen was as follows: "The liver cells show extensive parenchymal degeneration of the cytoplasm. The biliary canaliculi are distended with bile, and many liver cells are bile-stained. Moderate round cell infiltration is noted about the biliary ducts. The lesions appear to be degenerative with marked biliary stasis and mild nonspecific inflammation" (fig. 1). Postoperatively the patient developed ascites requiring paracentesis 4 times during her hospitalization of 4 months. On December 24, 1940 she was discharged and observed at intervals in the outpatient department, where abdominal paracentesis was done every 5 weeks for the next 6 months, after which the fluid did not reform and the patient was apparently well. The patient also stated that years before she had been treated for syphilis and had been pronounced cured.

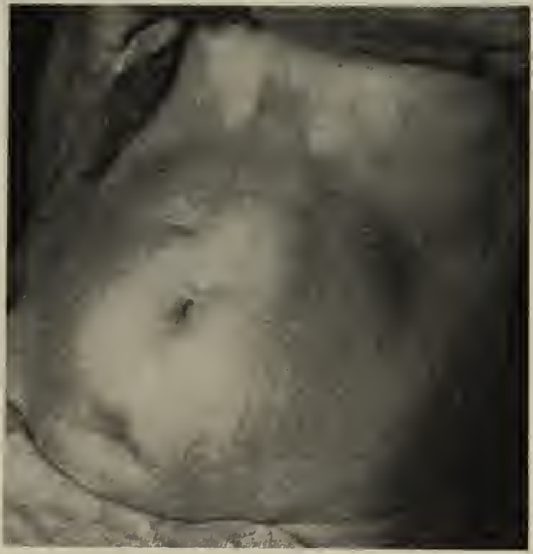

Fig. 2. Case 1. Infra-red photograph of abdomen, showing mainly the tortuous vein on left side of upper abdomen disappearing in region of xiphoid.

A more thorough physical examination made after the patient became coöperative following the coma showed several prominent tortuous veins coursing up the abdominal wall mainly over the left rectus muscle and disappearing in the region of the xiphoid process (fig. 2). The edge of the liver was just palpable on deep inspiration, and the spleen was felt below the costal margin for 1 fingerbreadth. In the lower sternal region a loud, high-pitched whirring murmur was heard. It was more or less continuous but of varying intensity and pitch like the sound of a high wind blowing around a corner. There was definite fluctuation of the murmur with respiration; it became louder with deep inspiration, waned about 70 per cent during expiration, but became strong again at the end of expiration. It was loudest over the xiphoid process and radiated with diminishing intensity up to the neck, over the precordium and right hemithorax anteriorly and along the costal margins, but only a short distance downward into the epigastrium. The murmur was loudest when the patient was supine and much less intense when she was prone. There was no thrill.

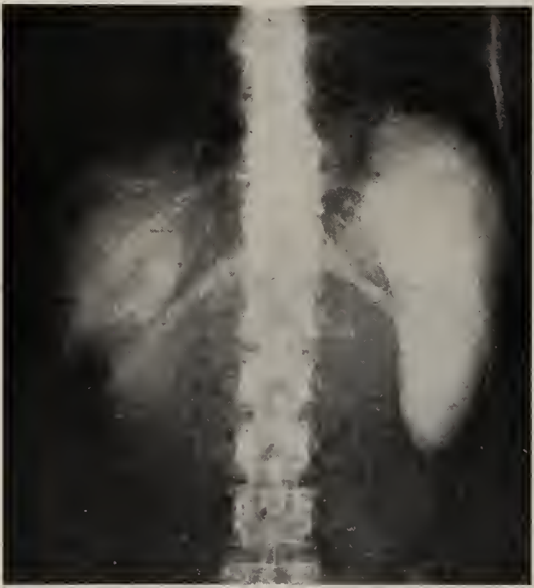

Fig. 3. Case 1. Thorotrast hepatosplenogram, showing small liver of less than normal opacity and moderately enlarged spleen (no ascites).

Roentgenographic examination of the thorax and gastrointestinal tract was negative, but a hepatosplenogram (made after the intravenous injection of 75 c.c. of Thorotrast) showed the liver to be small and much less dense than normal and the spleen to be moderately enlarged (fig. 3). This is the appearance caused by cirrhosis of the liver but could also be that of hepatic atrophy with portal hypertension. A bromsulfalein test showed 75 per cent retention of the dye after 5 minutes and 10 per cent retention after 30 minutes; and a hippuric acid test resulted in the excretion of 2.1 grams in 4 hours. The prothrombin time (Quick method) was 35 seconds. There was 6.1 grams of protein per 100 c.c. of blood, with 3.8 grams of serum albumin and 2.3 grams of serum globulin. Serologic tests of the blood for syphilis were negative.

The course of the patient in the Hospital after recovery from the initial acute episode was uneventful. She regained her strength and appetite and when discharged 31 days after admission was asymptomatic. She has been seen periodically since that time and has remained well. The characteristics of the murmur have not changed.

Discussion of Case 1. A review of the biopsy specimen, unsatisfactory as many biopsy specimens of the liver are, did not allow us to state the exact nature of the lesion existing. From the description of the surgeon of the gross appearance of the organ and on the basis of the hepatosplenogram, cirrhosis of the liver seems probable. If this be true, this case must be called an instance of the Cruveilhier-Baumgarten syndrome and not the disease.

Case 2.—A. B., a 31-year-old Hebrew, a private patient of Dr. Aaron Nimitz, was admitted to the Georgetown University Hospital on May 18, 1944, complaining of nausea, vomiting of bright red blood, faintness, and upper abdominal, colicky pain. He had been ill for the preceding 14 months with weakness, fever and gradual enlargement of the abdomen. His occupation was that of clerk, but he had not worked for a year. He had had 5 previous admissions to Garfield Memorial Hospital. He first entered that institution on March 21, 1943, complaining of sore throat, low-grade fever, pain in the back, headache, anorexia, a purulent discharge from the right eye, and diarrhea of 3 days' duration with a history of frequent attacks of "flu" and epistaxis. Physical examination revealed nothing more than pharyngitis, conjunctivitis and tympanites, and he was discharged after 8 days. On May 17, 1943 he was readmitted because of persistence of fever and abdominal distention and tenderness. Purpuric spots had appeared on his legs and he had become very weak. This time splenomegaly was discovered. The red blood cells numbered 3,700,000 per cu. mm. of blood, the white blood cells 3,000, and the blood platelets 50,000. Bleeding and clotting times were normal. Agglutination tests, blood cultures, smears for malaria and serologic tests of the blood for syphilis were negative. He was discharged after a week. The third admission was 2 days later, when peritoneoscopy was performed. This showed splenomegaly, a small amount of ascitic fluid and no evidence of tuberculosis or malignant neoplasm. Roentgenograms of the chest were negative. The low-grade fever was still present. The fourth admission was on March 21, 1944. He was still complaining of weakness, fever, recurrent purpura and, in addition, nocturnal cramps in the legs. The heart appeared to be slightly enlarged; there was a systolic apical murmur and a "cooing dove" murmur over the xiphoid process. A cephalin flocculation test was 2 plus in 24 hours and 3 plus in 48 hours. A galactose tolerance test resulted in the excretion of 1.9 grams, and a bromsulfalein test showed 90 per cent retention after 30 minutes. There were persistent albuminuria and leukopenia. The sedimentation rate of the erythrocytes was normal. The hematocrit showed 35 per cent red blood cells. The blood sugar was 99 mg. per cent before breakfast and 222 mg. per cent before supper. Arm-to-tongue circulation time was 10 seconds; the venous pressure in the right arm was 210 mm. of water and in the right leg 620 mm. of water. A Thorotrast hepatosplenogram showed a large spleen and a small liver of reduced opacity. The patient was discharged after 10 days, but was readmitted on April 18, 1944 complaining of fainting, nausea, hematemesis, melena and colicky abdominal pains. Ascites was detected and 5,300 c.c. of fluid was removed from the abdomen. The red blood cells numbered 2,500,000 per cu. mm. of blood. Although there is no notation on the chart, it is our understanding that at this time Dr. Lewis Ecker and Dr. Benjamin Manchester made the diagnosis of Cruveilhier-Baumgarten syndrome. The patient was discharged after 2 weeks, having received several blood transfusions.

The admission to Georgetown University Hospital followed the vomiting of about a pint of blood. The patient was acutely ill and very weak and emaciated. The temperature was 102°F., the pulse rate 80 per minute, and the respiratory rate 18 per minute. The blood pressure was 130/54. The skin and sclerae were slightly icteric. The lungs were clear, and there was slight cardiac enlargement with a loud systolic, localized, apical murmur. The abdomen was distended and there was evidence of ascites. Several large, tortuous veins ran upward over the upper abdomen. The spleen was palpable 3 cm. below the left costal margin. In the lower sternal region and the epigastrium there was a thrill and a loud, continuous, high-pitched, roaring or whining murmur. This sound was transmitted upward as far as the jugular notch and to both sides of the lower thorax but more toward the left. It varied with respiration, reaching a higher pitch at the end of inspiration and becoming a low-pitched rumble in full expiration It changed very slightly with change of position of the body.

Urinalysis showed slight albuminuria and a few casts. There was 87 per cent hemoglobin; the erythrocytes numbered 4,450,000 and the white blood cells 15,200 per cu. mm. of blood, with 23 per cent band forms. Kahn and Eagle tests of the blood were negative. The total serum protein was 6 grams per 100 c.c. of blood; the van den Bergh reaction was indirect with 2.5 mg. per cent of bilirubin in the blood. The prothrombin time was 70 seconds (Quick method).

The course in the Hospital was rapidly downhill. The temperature dropped gradually to normal in 48 hours. There was no recurrence of the hematemesis, but the patient complained bitterly of upper abdominal pain. On the third hospital day he gradually lapsed into coma, after which it was noted that the epigastric thrill and murmur disappeared entirely for short periods of time. Finally, several hours before death they ceased entirely. Permission for necropsy was stoutly refused because of religious scruples of the relatives.

Discussion of Case 2. There can be no question of the existence of severe disease of the liver in this case, but the exact nature of the lesion is uncertain. Some form of cirrhosis undoubtedly existed, and it is possible that it was associated with chronic pylephlebitis as suggested by the practically continuous, low-grade fever. Thus, this case also is probably one of the Cruveilhier-Baumgarten syndrome rather than the disease.

COMMENT

It is the existence of the unusual murmur in these cases that differentiates them from other cases of disease of the liver and gives them the label of Cruveilhier-Baumgarten syndrome. The mechanism of production of the murmur is still unsettled, although it would seem that it is wholly of venous origin. To our knowledge, if this is true, this is the only known example of murmur of such origin except the venous hum sometimes present normally in the neck. Other murmurs of similar characteristics are caused by arteriovenous communications, the only difference being the variable intensity and quality of the murmur in the Cruveilhier-Baumgarten syndrome. By analogy we may predicate that the murmur results from the flow of blood from small vessels into large ones in or close to the abdominal wall. For such a situation it is not necessary to assume that patency of the umbilical vein exists. We believe that if care is taken to auscultate the epigastrium in cases of disease of the liver, mainly advanced cirrhosis, such a murmur will be discovered more often; it is not the usual practice to auscultate the abdomen except in cases of suspected intestinal obstruction or ileus. Another factor in detection of the murmur is to learn to adjust one's hearing to such high-pitched sounds; otherwise they may be overlooked. A similar problem exists in the detection of high-pitched aortic diastolic murmurs, which are sometimes not elicited even by experienced clinicians.

SUMMARY AND CONCLUSIONS

According to the latest and most nearly complete review there have been 55 cases of the Cruveilhier-Baumgarten syndrome (and/or disease) recorded in the medical literature. The 2 cases herewith reported bring the number to 57. One patient is still alive without complaints; the other died but necropsy was not performed. Both patients had disease of the liver, probably cirrhosis. The characteristics of the murmur have been described in more detail than heretofore. If the epigastrium is auscultated routinely in cases of cirrhosis of the liver, the murmur may be found to be not so rare as is thought at present.

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Find that penicillin permits early skin grafting on burns. Penicillin appears to be the solution to one of the chief problems involved in early skin grafting of burned areas, JOHN WINSLOW HIRSHFELD, M.D.; MATTHEW A. PILLING, M.D.; CHARLES WESLEY BUGGS, PH.D., AND WILLIAM E. ABBOTT, M.D., Detroit, report in *The Journal of the American Medical Association* for August 12, 1944. They report that from their experience with 17 patients to whom penicillin was administered at the time of skin grafting they believe that the use of the drug permits early grafting and also appears to prevent the loss of skin from infection that ordinarily occurs in about one-third of the cases in which split thickness grafts are placed on contaminated recipient sites. Nineteen split thickness grafts were performed on the 17 patients. With one exception, from 90 to 100 per cent of the transplanted skin took in every instance, the exception occurring in an uncoöperative alcoholic addict on whom 80 per cent of the grafts took.

"Before penicillin was available," they say, "we performed over a hundred grafts in patients with third degree burns. Although many excellent takes were obtained, in about one third of the cases 25 per cent or more of the graft was lost because of the occurrence of infection. Therefore the consistency with which excellent takes were obtained in this series of 19 grafts has been very impressive to us. . . ."

The authors point out that "Few patients are more miserable than those with large unhealed third degree burns. Early skin grafting of the burned areas is the only means of quickly returning these patients to a useful life. The longer this procedure is delayed, the greater the immediate threat of death and the ultimate development of scars and deformity. The aim of all treatment, therefore, is reëpithelization of the burned areas as promptly as possible. In general, it requires from one to three months to achieve this aim. . . ."

They say that the necessity of grafting the same area more than once is the chief factor tending to prolong the convalescence of such patients and that infection is the chief cause of failure of skin grafts to take.

All of the 17 patients received penicillin by injection into the muscles, the dose and the duration of treatment varying somewhat from patient to patient. In general, penicillin treatment was started about twelve hours before operation and was continued until the time of the first dressing.

"The administration of penicillin," they say, "did not seem to alter the bacterial flora a great deal; cultures taken at the time of the first dressing from the margins of the grafts and from the sutures usually yielded the same organisms that were present on the granulating surface before grafting. In spite of their persistence, they did not seem to affect the growth of the graft. Penicillin, therefore, must hold them in check until the skin has a chance to become established in its new bed."

PENTOTHAL SODIUM AS A RECTAL ANALGESIC DURING LABOR*

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Washington

THIS presentation is a short preliminary appraisal of a newer role for pentothal sodium in obstetrics. That anesthetic drug, the chemical name for which is sodium ethyl thiobarbituric acid, is not new to physicians in the United States. It has been accepted with wide acclaim for its many virtues, as attested to by the more than 60,000 published cases of its use by the intravenous route, in addition to the many more thousands of unpublished instances.

Introduced for the first time in 1935 by Lundy[1] of the Mayo Clinic, it was then used cautiously and urged upon other anesthetists with caution; but today Carraway and Carraway[2] state dogmatically that combined with oxygen inhalations there are no contraindications to its use.

In the combat zones of the present World War it is responsible for the saving of many lives because it makes possible urgent emergency procedures practically at the place of injury. It obviates the shock and delay of transporting an incompletely treated soldier to a removed base where other more cumbersome anesthetics are available. The simplicity with which it can be administered and transported, and the rapidity of induction and recovery are factors which make pentothal sodium so desirable in military surgery.

Every branch of major and minor civilian surgery demands its intravenous use, either as a basal anesthetic or as the sole anesthetic of choice. Recently from Chicago, Weinstein and Light[3] reported the use of pentothal sodium rectally as a basal induction anesthesia in a series of 1,500 surgical cases, including 30 obstetric patients. The small total quantity of medication used plus the safety and rapidity of its action in that series arrested our attention, and we saw some possibility for its application in obstetrics.

In our persistent desire to make labor as painless as is safely possible for each patient we have been aware that there is a group of women who due to certain circumstances do not get as much relief from their suffering as we believe they deserve. They are that larger group of multiparae and a much smaller group of primiparae whose labors are rather rapid and who enter the hospital one or two hours before actual delivery, having frequent painful contractions with the cervix well dilated and obliterated.

The usual rule used to be to order enemata and then after that procedure to administer orally one of the barbiturates. However, the contractions came so close together that the patient was often unrelieved. When the commonly used rectal medications were administered in these cases they were retained, if at all, with great discomfort due to their bulk and the pressure of the presenting part in the pelvis. Portions of the still-retained enema were also expelled due to the irritation caused by the mixture of the analgesic and the soapsuds.

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* Originally presented before a joint meeting of the Medical Society of the District of Columbia and the Washington Gynecological Society, April 12, 1944, this paper has been brought up to date in the number of cases observed.

Labor soon merged into the second stage when either gas or ether, whichever was the most accessible, was finally given. Vomiting and coughing were too often provoked by this sudden administration of a general anesthetic to an unprepared patient, who even then may have had to receive inhalations of the anesthetic over an unnecessarily prolonged time before she was actually delivered.

Of course, some of the patients in this group respond quickly to the oral and bulkier rectal medications, but by far the majority fit the above description. We have found to our great satisfaction that pentothal sodium when administered rectally to these patients gives almost instant relief. Using 1 gram to each 50 pounds of body weight dissolved in 15 to 20 c.c. of tap water, this drug is administered into the rectum by the gravity method through a small catheter, or forced with the aid of a bulb syringe. No sterile technic is required.

Since no enemata are necessary, or desired, and the quantity of the medication is small, the patients have no realization of the introduction of the drug or urge to expel it.

Sleep or unconsciousness overtakes the woman in from 5 to 10 minutes in spite of tumultuous pains. Restlessness is immediately overcome, as well as any boisterousness. This state persists from 60 to 90 minutes, at which time most of these patients are ready to be delivered. The general anesthetic then usually consists of a higher-than-usual oxygen concentration with ethylene.

The drug is completely and rapidly broken down in the body, and eliminated and repeated instillations may be safely made in smaller doses when the patient begins to awaken, or in the same dose if she should fully awaken.

At the Garfield Memorial Hospital one of us (S. M. D.) has followed this method when indicated in 101 of his own obstetric cases, of which 13 were primiparous women. Dr. Katzman has observed this method in 43 additional cases at the Sibley Memorial Hospital. When 1 gram for each 50 pounds of body weight was administered the desired effect was always obtained in 5 to 10 minutes. There were no ill effects upon any of the babies; and many of them needed no resuscitation or stimulation of any sort, since the general anesthetic used was frequently 25 to 75 per cent less concentrated than usual. There was no cessation of labor, but rather a rapid dilation of the cervix usually followed. There was a slight temporary drop in blood pressure and a slight increase in pulse rate, but the quantity of blood lost immediately postpartum was no greater than the usual minimal amount.

The margin of safety is wide with pentothal sodium and an overdose is uncommon. The awakening period is usually smooth and we have observed no excitement during the induction. The patient must be attended, since while she lies motionless there is sometimes a relaxation of the jaw and tongue and since the presenting part may distend the vaginal opening. We recommend that the solution be given with the patient on her side and that she be allowed to remain so to prevent the possibility of obstructed breathing.

We have had no complications in the administration of this drug and none were reported in the 1,500 surgical cases previously referred to, but we believe that it is important to be familiar with the treatment of overdosage. The air passages must be cleared at once, using an airway; oxygen is administered immediately and any associated shock is treated. Metrazol and picrotoxin are also used.

Our clinical observations revealed no local irritation or inflammation in the rectum, and these observations agree with the experiments done in the Abbott Laboratories upon the effect of pentothal sodium on dogs and rabbits. Experimental work done by Scheifley and Higgins[4] and Richards and Appel[5] indicate with conviction that neither the liver nor the kidneys are concerned with the destruction of the drug in the body. None of the patients in our series suffered from any form of toxemia, but we would not hesitate to use it in such cases.

Pentothal sodium is excellent in the doses recommended by us to produce unconsciousness or anesthesia so that intravaginal or intracervical examinations or manipulations which might otherwise be painful can be performed easily and thoroughly. The induction of labor by cervical stimulation and rupture of the membranes can be done after sleep has been induced. If the patient is also given an analgesic dose of one of the barbiturates orally at the time the rectal administration is given she will sleep for a prolonged period and never be aware that labor has begun. Sleep can be made continuous through labor and delivery by repeated doses of the oral or rectal medications and the final administration of the gaseous anesthetic.

Our experience with the methods outlined have been most satisfactory, and we are equally convinced that a gap which hitherto existed in obstetric analgesia has been closed.

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Says evils of political medicine shown by N. Y. state setup. The management of the Department of Mental Hygiene of the State of New York provides an example of what the American people may expect if political medicine ever takes over general medical care in this country, *The Journal of the American Medical Association* declares in its September 2, 1944 issue. *The Journal* says:

"When an epidemic of amebic dysentery occurred in the Creedmoor State Hospital in New York in March 1943, Gov. Thomas E. Dewey appointed a commission to investigate the management and affairs of the Department of Mental Hygiene of the State of New York and the institutions operated by it. That report, which has just been made available, emphasizes again the defects that seem inseparable from political medicine. In 1942 New York mental hospitals were caring for 83,053 patients at an annual cost of $30,474,048.08. The commission found everywhere signs of inadequate examination of mental defectives, unsatisfactory recording of physical conditions on admission and lack of professional care, owing largely to the use of an undermanned professional staff. 'The emphasis in all the institutions has been on administration at the expense of clinical medicine,' says the report. This is the familiar criticism of all types of political medicine. In the mental hospital service in New York State advancement went to 'careerists' and not to the psychiatrists of wide experience and knowledge. New methods of treatment such as shock and physical therapy disturbed the routine of the institutions and were therefore neglected. The report indicates that this service had not attracted competent physicians. Nurses were insufficient in numbers and defective in quality and were assigned to administrators and their families rather than to patients. The diets were monotonous and were not supervised by dietitians. Research and education were neglected or isolated in bureaucratic subdivisions apart from the treatment of patients. Here were all the apparently inevitable evils of mass medical treatment. Here were all the faults that usually accompany compulsory political care. Here, in miniature, is a picture of what the American people may expect if political medicine ever takes over general medical care in this country."

Pulmonary tuberculosis is present in a significant proportion of adult patients admitted to general hospitals and remains undetected during the hospital stay unless all patients receive routinely a chest X-ray examination. Such unrecognized tuberculosis is a hazard not only to the patients themselves but also to the hospital employees who may be exposed to it. One of the measures eessential to the solution of this problem is routine chest X-ray examination of employees.

Although the discovery of tuberculosis among hospital employees is necessary for the protection of both employees and patients, the detection of the disease in patients is obviously of equal if not greater importance. It is hoped, therefore, that hospitals, physicians, and others will give more recognition to the existence of this problem and to the need of a complete plan of action, including routine chest X-ray of all adult admissions as well as periodic examination of medical students, nurses, and all other employees. N. Y. State Dept. of Health: *Health News*, May 8, 1944.

THE MORTALITY OF ACUTE OBSTRUCTION OF THE SMALL INTESTINES*

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ACUTE dynamic obstruction of the small intestine is characterized by progressive changes in the local pathology of the bowel and increasing metabolic disturbances. If unchecked these changes eventually reach an irreversible stage and death becomes inevitable. The local and systemic reactions in acute obstruction are now well known. Means of combating the metabolic disturbances are available, including blood plasma. The continuous suction method of aspirating the upper gastrointestinal tract, popularized by Wangensteen,[1] has proved to be of inestimable value. Finally, the use of X-ray examinations has led to earlier diagnosis and more prompt surgery. The proper interpretation and application of these facts has led to a reduction in the morbidity and mortality rate of acute intestinal obstruction. The object of this paper is the presentation of a discussion of the pathologic physiology of acute obstruction of the small bowel and the comparison of the results obtained in two series of cases at the Gallinger Municipal Hospital. The cause of the obstruction in all of the cases was bands or adhesions.

The mass of data accumulated from the experimental laboratories[2] and from clinical studies[3] can be condensed into a few essential facts. The local lesion consists of distention of the bowel, alteration in its secretory and absorptive functions, impairment of local circulation, and eventually gangrene of the involved segment of intestine. The metabolic disturbances consist chiefly of loss of water, electrolytes (Na, Cl, HCO_3), and plasma and the retention of non-protein nitrogen and urea. The end result of these metabolic disturbances is dehydration, hemoconcentration, shock and death.

LOCAL PATHOLOGIC ANATOMY

The entire pathologic physiology of acute intestinal obstruction is initiated and sustained by the alterations that occur in the involved bowel. The obstructing band or adhesion may simply occlude the lumen, or it may also obstruct the blood supply to a segment of the bowel. The essential difference in these two processes is the more rapid deterioration in the cases of vascular strangulation. When the lumen of the bowel is completely obstructed there is a stoppage of the flow of its contents. Fluid in the form of intestinal juices continues to be secreted and there is an accumulation of gas in that portion of bowel above the obstruction. The gas is largely derived from swallowed air. As the amount of fluid and gas increases the bowel begins to distend. The increasing distention produces an alteration in blood supply of the bowel wall. This results in abnormal pouring out of fluid into bowel and later into the peritoneal cavity. The fluid now contains not only intestinal juices and electrolytes but also plasma. By the same token there is a diminution in the reabsorptive functions of the intestinal mucosa.

The motility of the bowel plays its part in the local disturbance. At first there is an attempt to break through the obstructed region by increasing the force of the peristaltic wave. As the peristalsis increases in magnitude loops of the bowel are likely to become twisted and this torsion may produce a complete strangulation. Once the bowel loop has been strangulated gangrene is imminent. Peristalsis diminishes and may cease entirely and adynamic ileus results. This fact should be kept in mind because it becomes very important during the first few days after releasing the obstruction. As the bowel deteriorates small areas of necrosis of the bowel wall develop through which contents of the bowel may leak. This material is highly contaminated and generalized peritonitis is almost sure to result. As the local lesion progresses toward gangrene of the bowel the systemic metabolic changes are progressing toward the picture of dehydration, hemoconcentration, failure of renal function, and eventually death.

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Metabolic Disturbances

The systemic or metabolic disturbances that occur in acute intestinal obstruction are mainly those resulting from the loss of fluid and electrolyte imbalance. Normally an individual maintains fluid balance by intake of adequate amounts of water and electrolytes. A certain reserve is always on hand. The fluids of the body are divided into three systems. About 15 per cent of the body fluid is contained in the blood (5 per cent of the body weight), about 35 per cent in the interstitial fluid (15 per cent of the body weight), and about 50 per cent (50 per cent of the body weight) is intracellular fluid. The water of the blood and interstitial fluid is easily mobilized and can be shifted as metabolic needs require. The intracellular fluid is more or less fixed and even a slight shift will upset body metabolism. The gastrointestinal tract secretes approximately 8,000 c.c. of fluid in 24 hours, practically all of which is reabsorbed. This shifting of fluids and electrolytes into the lumen of the bowel and back into the blood and lymph is a continuous process and does not affect the balance of the body fluid.

In intestinal obstruction the secretory and reabsorptive functions of the bowel are upset. The distended bowel secretes even more fluid than the normal bowel and at the same time there is little or no resorption. This accumulated fluid is either lost by vomiting or immobilized in the bowel. The lost fluid carries with it electrolytes in varying amounts. As the bowel distention increases plasma is also lost into, and even outside, the bowel lumen. At first the mobile fluid and electrolytes of the blood and interstitial lymph compensate for the fluid that is lost. These are rapidly depleted, however, and soon the final fluid reserve, the intracellular fluid, is drawn upon and a true picture of starvation, hemoconcentration, and dehydration results. Death follows from loss of substance, water, electrolytes and plasma, or from infection. It becomes apparent that the outcome of any case of intestinal obstruction depends upon the speed at which this vicious cycle of progressive deterioration of bowel function and increasing metabolic disturbance is broken. This can be well illustrated by the comparison of the two following groups of cases.

Results in Group 1

This group includes all the operative cases of acute small bowel obstruction caused by bands and adhesions from January 1933 to July 1938. These cases were handled by a large group of surgeons. They did not have the benefit of plasma, and Wangensteen suction was not in common use, nor were immediate X-ray examinations used to any degree. Prompt correction of fluid and electrolyte balance was not routinely practiced. Surgery was too often delayed. In most cases fluid was allowed by mouth soon after completion of the operation.

There were 80 cases in this group, of which 42 lived and 38 died, a mortality rate of 47.5 per cent. Table 1 shows types of operations performed on the first series of cases.

TABLE 1

TYPES OF OPERATIONS	NO. OF CASES	NO. OF DEATHS
Simple lysis	37	7
Lysis and enterostomy	22	14
Resection—		
A. Primary (5)		
B. Exteriorized (4)	9	7
Perforations—		
A. Lysis and closure (4)		
B. Lysis and enterostomy (4)	8	7
Exteriorized loop	1	0
Death before completion of operation	2	2
Total cases	80	38

Several items in table 1 attest to the degree of distention present in this group. In only 37 cases did a simple cutting of the bands and adhesions suffice. In 26 cases enterostomy was necessary and 18 of these patients died. There were 9 resections of loops of the bowel with 7 deaths. There were 8 perforations with 7 deaths. Further information may be gained from a review of the period at which death came in the fatal cases; 16 of the patients died within 24 hours, 22 died after 24 hours.

RESULTS IN GROUP 2

This second series include all of the operative obstruction cases caused by bands and adhesions from July 1938 through December 1943. It was during this period that plasma was made available by the establishment of a blood and plasma bank at Gallinger Hospital through the efforts of Drs. Charles S. White and Jacob J. Weinstein. The Wangensteen suction was available for all cases. The management of this group was under the control of one surgeon, and it was possible to standardize the treatment. A routine policy of management of all suspected cases of acute obstruction of the small intestine was established. These cases were considered urgent emergencies from the moment of admission until complete convalescence was assured. Early operative intervention was the keynote. Besides the usual routine history, physical examination and laboratory procedures these patients had immediate roentgenograms of the abdomen after a cleansing enema for detection of fluid levels. This procedure proved to be of considerable aid in obtaining a rapid diagnosis and making early surgery possible. The Wangensteen method of continuous aspiration of the upper gastrointestnal tract was used routinely before, during and after operation until normal peristalsis had been reëstablished. Until active peristalsis returned, usually in 48 hours, nothing was given by mouth or rectum. On admission immediate steps were instituted to correct fluid balance or prevent further loss of fluid. The appropriate fluids (water, electrolytes, plasma) for the particular case were given as required. Substitute therapy was continued on the operating table and following surgery until the reabsorptive function of the intestines was regained and there was free passage of gas through the bowel. Seldom was any drug except morphine needed during the convalescent period.

In this second group there were 83 cases, of which 74 recovered and only 9 died, a mortality rate of 10.8 per cent. Table 2 shows the types of operation performed in this group of cases.

TABLE 2

TYPES OF OPERATIONS	NO. OF CASES	NO. OF DEATHS
Simple lysis of adhesions	67	4
Resections (1 perforation)	12	3
Perforations (4 closures)	4	2
Total cases	83	9

In this series it is shown that almost twice as many cases required only the simple cutting of the bands and adhesions as in group 1. In none of these was it necessary to perform an enterostomy. This surely attests to the value of early operation and the continuous aspiration of the upper gastrointestinal tract by means of the Wangensteen suction. There were only 4 deaths in this uncomplicated group of 67 cases, a mortality rate of 5.9 per cent. There were 4 perforations of the bowel, and 2 of these patients died. Finally, there were 12 resections of a segment of bowel with only 3 deaths. Two factors probably account for the results in the resections. In the first place, the absence of marked distention allowed a better suture line; second, the intra-abdominal use of sulfanilamide undoubtedly helped to control infection during the contamination period.

Summary and Conclusion

The mortality rate of acute intestinal obstruction is largely the mortality of delay and rises each hour that proper treatment is delayed. The measures needed to correct the pathologic physiology depend upon the stage of the process at which the patient arrives for treatment. However, it is possible to summarize the general plan of management by stating that correction of fluid and electrolyte balance, the prevention of further distention, and the removal of the cause should go hand in hand. One measure should not cause any material delay in instituting the others. The false sense of security often gained through substitute therapy has too frequently allowed "the sands of time to run out," and an irreversible state of affairs has resulted. Release of the obstruction does not mean the immediate return to normal bowel function. Many patients with intestinal obstruction have died from postoperative ileus and distention. Therefore, substitute therapy must be carried out after the operation until the normal process of secretion and absorption has been regained by the gastrointestinal tract.

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Combine immunization against whooping cough, diphtheria. Studies show that infants can be immunized successfully against diphtheria and whooping cough at the same time, Louis W. Sauer, M.D.; Winston H. Tucker, M.D., and Eva Markley, R.N., Evanston, Ill., report in *The Journal of the American Medical Association* for August 5, 1944. This finding is important in view of the increasing number of immunization procedures required in early life to protect against various disease hazards.

"The routine injection of diphtheria toxoid during the latter part of the first year of life," the three investigators explain, "has almost completely eliminated diphtheria in most localities; and, during the time that infants after the age of 7 months have been injected with potent pertussis vaccine, whooping cough morbidity and mortality have decreased at an encouraging rate.

"Because diphtheria and whooping cough are most prevalent and serious in the first years of life, it seemed logical that immunization against the two diseases should be attempted at the same time by the injection of mixtures of diphtheria toxoid and potent pertussis vaccine. . . ."

They started their investigations in 1938. The present report is based on the findings from injections given 649 infants at the Evanston Health Department Immunization Clinic and at St. Vincent's Infant and Maternity Hospital, Chicago. All were more than 7 months of age when the injections were begun. The average age was about 8 months. Three doses were given each infant. To determine the time interval factor, the infants were injected at one week intervals at St. Vincent's and at three week intervals at the Evanston Health Department Clinic.

The three week intervals between the three doses yielded a higher percentage of immunity responses than when the doses were given at one week intervals. Ninety-seven per cent of the three week interval group had negative Schick tests for diphtheria and 72 per cent had high immunity tests for whooping cough. After a stimulating dose of pertussis vaccine, the whooping cough percentage rose to 95. Reactions were transient and usually mild.

The three investigators say that "No infant so injected during the past five years . . . is known to have contracted either disease."

Those in the general health field are apprehensive wherever social and economic factors have dislocated and reconcentrated large groups of the population. Such upheavals create what might be called an epidemic potential. One soon knows what is happening in acute communicable diseases for there is a sharp dividing line between health and acute disease. This is not the case in tuberculosis. Here the period of incubation as used in its ordinary sense is vague, ill-defined, and long-drawn out. The onset is not dramatic and neither morbidity nor mortality figures of today reflect what is happening currently. In so far as this disease is concerned, the aftermath of the present social and economic dislocations is as important, if not more important than the immediate effect. One must meet current problems as they arise but one must recognize that danger may not manifest itself for years to come. Harry Mustard, M.D.: Nat. Tuberc. A. Tr., 1943.

ACUTE GANGRENE OF THE CECUM

Report of Two Cases

OLIVER C. COX, M.D.
Washington

THE reporting of cases is something to be undertaken with much misgiving. It is rare to have a disease to report that is not so common that it is trite, or else so very rare that it is of no practical benefit. However, within a period of 8 weeks 2 patients with identical conditions came to Sibley Hospital. To me, these were exceedingly interesting and probably rare. Since their symptomatology was the same they will be described together.

Report of Cases

Mrs. J., aged 54 years, was referred to me by Dr. J. Chester Brady. Mr. J., aged 65 years, was referred by Dr. John F. Harrington. Both stated that of recent months they had been having difficulty in getting their bowels to move and that there was a sense of fullness in their abdomens and some gas. For some indefinite time they had been resorting to physics. Just previous to the illnesses to be described both patients had taken strong cathartics, which probably had acted as effectually as usually had been the case; but, within 12 to 18 hours each began to suffer severe abdominal pains followed by nausea, vomiting, and severe pains in the right lower quadrant. Mr. J.'s temperature was considerably elevated, 103.8°F.; Mrs. J.'s was 100°F. Dr. Brady diagnosed his case as a severe abdominal condition requiring surgery. Dr. Harrington thought his case one of a right kidney affection and called Dr. Gable, who ruled out that organ. I, remembering the admonition of the late Dean Borden to consider first the most likely condition, diagnosed a ruptured appendix in both cases. Here each case will be described separately. Because of the differences in their ages and general conditions, they were treated differently. Each was operated on during the second day of illness.

Mrs. J. was given an ether anesthetic, and a gridiron incision with transverse skin (Davis, 1906) was made. In the abdomen there was excess fluid, brown and foul-smelling. The entire cecum and a part of the ascending colon were distended and black, that is, entirely gangrenous. The appendix was retrocecal, adherent, but not involved. The mesentery of the cecum and the ascending colon looked all right but were thought to be thrombosed and it was so mentioned in the operative description, but this was not true. There was a carcinoma of the hepatic flexure causing partial obstruction. The gridiron incision in the lower right quadrant was enlarged, and the terminal ileum, appendix, cecum and one third of the transverse colon were resected. After closing the mesentery, a Parker-Kerr aseptic basting stitch end-to-end anastomosis was done. The incision was closed without drainage and without the use of a sulfonamide.

Mr. J., because of his age, very high temperature and the gravity of his general condition, was operated on under local 2 per cent novocaine. Incidentally, penicillin was begun before operation empirically, without a culture being taken. Again I was positive of a ruptured appendix. The same right lower quadrant incision was made, the same brown fluid was found in the abdomen, and again there was the gangrenous cecum. This time the cecum was much distended, entirely black to its mesenteric edge. The appendix was small and fibrous and was not involved. The ascending colon was not gangrenous but was distended and there was a carcinoma at the hepatic flexure. Here the treatment differed from that of the previous case. The cecum was exteriorized and a tube was inserted. Iodoform gauze pack about the gut was used to protect the peritoneal cavity. After 12 days of drainage, the temperature was normal and the patient's general condition was better. Under spinal anesthesia the gridiron incision about the opened gut was enlarged and a resection of the gut, including a few inches of the terminal ileum to one third of the transverse colon with open end-to-end anastomosis, was done. Incidentally, the cecum was entirely sloughed away. The peritoneum was closed and the incision was packed with iodoform gauze. This gauze was not removed until the ninth day. No sulfonamide was used. There was considerable pus present but no sloughing of the tissue and no bowel leakage existed.

(*Continued on page 362*)

16th

Annual Scientific Assembly

of

THE MEDICAL SOCIETY

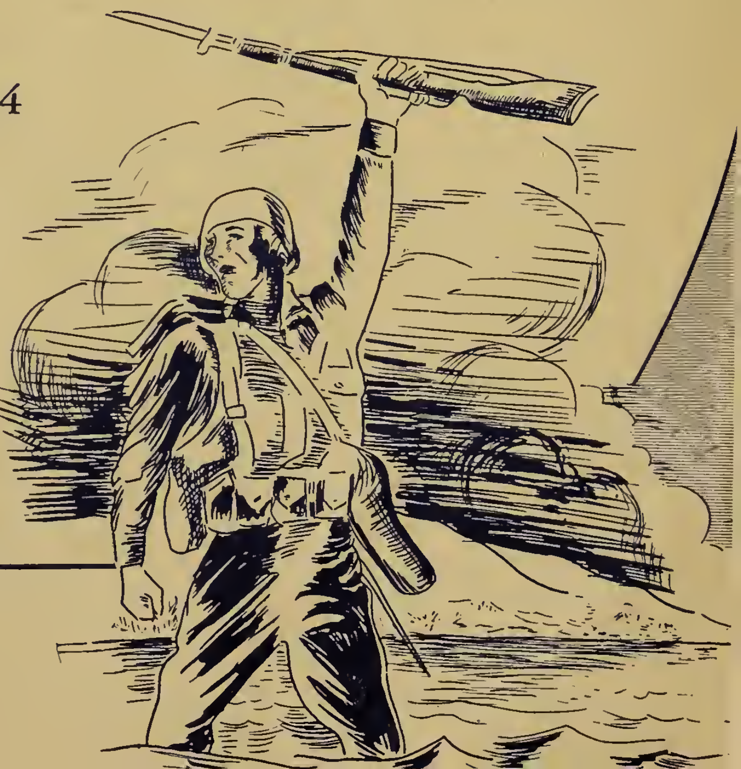
of

THE DISTRICT OF COLUMBIA

OCTOBER 5, 6, 7, 1944

MAYFLOWER
HOTEL

WASHINGTON



What Our Assembly Offers

The 16th Annual Scientific Assembly, the third held during this war, will like its predecessors emphasize various phases of military as well as civilian medicine. Members will recall that the themes of the two previous meetings were "Medical Problems of the War Era" and "Medical Progress Since Pearl Harbor." This year the theme is "A Preview of Postwar Medicine." Rehabilitation of military and civilian casualties is to be featured not only on the scientific program but in the exhibits.

Participating in the Scientific and Rehabilitation Exhibits will be the Army, Navy, Army Air Forces, the United States Public Health Service, the Veterans Bureau, the local medical profession and medical institutions. All of these groups are represented on the scientific program, which the Committee on Arrangements feels is one of the best offered to date.

As in previous years there will be social functions, but on a modest scale because of the war. Luncheons are to be given by the Medical Society, the Georgetown University Medical Alumni Association and the George Washington University Medical Society. As usual there will be the Public Meeting on the second evening, and on the final evening Medical Officers' Night for all the physicians in the armed forces in or near Washington, their families, wives of service physicians stationed elsewhere, and Society members. Excellent entertainment is promised on this occasion.

When the Committee announced the 15th Annual Scientific Assembly last year, it warned that the future was uncertain and that the Assembly might not be held in 1944. However, it was found possible largely because of the splendid coöperation of the medical profession, Government agencies and the management of the Mayflower Hotel.

This year 100 per cent attendance of District physicians will be sought, every effort being made to have all members register. Dates of the Assembly should be noted on your calendar now—Ocotober 5, 6 and 7. Plan your appointments so that nothing will prevent you from being present for at least some sessions.

Arnold McNitt

General Chairman,
Committee on Arrangements

L OF TUBERCULOSIS IN THE

A Preview of Postwar Medicine

ALL SESSIONS IN GRAND BALLROOM, MAYFLOWER HOTEL

THURSDAY, OCTOBER 5—MORNING SESSION

RECENT DEVELOPMENTS IN MEDICINE—I

9:00 THIOURACIL TREATMENT OF THYROTOXICOSIS
Robert H. Williams, M.D.
Thorndike Memorial Laboratory, Boston City Hospital

9:30 ELECTRIC CONVULSIVE THERAPY IN PSYCHONEUROSES
Lothar B. Kalinowsky, M.D.
New York State Psychiatric Institute and Hospital

10:00 THE FUTURE OF OUR CORONARIES
Lieutenant Howard M. Odel
Medical Corps, U. S. N. R., U. S. Naval Hospital, Bethesda, Md.

10:30 RECESS

10:50 THE MALARIA PROBLEM
Louis L. Williams, Jr., M.D.
Medical Director, Office of the Surgeon General, U. S. Public Health Service

11:20 DIABETES TOMORROW
Howard F. Root, M.D., F.A.C.P.
Instructor in Medicine, Harvard Medical School

THURSDAY, OCTOBER 5—AFTERNOON SESSION

RECENT DEVELOPMENTS IN SURGERY—I

2:15 BILIARY TRACT SURGERY
Frank H. Lahey, M.D., F.A.C.S.
Boston

2:45 DIRECT OBSERVATION OF THE BRAIN UNDER PHYSIOLOGICAL CONDITIONS (Motion Picture)
Lieutenant C. Hunter Shelden
Medical Corps, U. S. N. R., U. S. Naval Hospital, Bethesda, Md.
Collaborators: Lieutenant Robert H. Pudenz, Medical Corps, U. S. N. R., and Lt. Commander Joseph S. Restarski, Dental Corps, U. S. Navy

3:15 RECESS

3:35 REGIONAL ILEITIS
George P. Muller, M.D., F.A.C.S.
Professor of Surgery, Jefferson Medical College of Philadelphia

4:05 MANAGEMENT OF VENOUS THROMBOSIS
J. Ross Veal, M.D., F.A.C.S.
Associate Professor of Clinical Surgery, Georgetown University School of Medicine

4:35 ORAL AND PLASTIC SURGERY
Commander George W. Christiansen
Dental Corps, U. S. N. R.; Chief of Oral and Maxillofacial Surgery, National Naval Medical Center, Bethesda, Md.

FRIDAY, OCTOBER 6—MORNING SESSION

RECENT DEVELOPMENTS IN SURGERY—II

National Naval Medical Center

9:15 SURGERY IN THE FORWARD ECHELON

Brigadier General Fred W. Rankin

Office of the Surgeon General, U. S. Army

9:55 INFLAMMATORY LESIONS OF THE LOWER GASTROINTESTINAL TRACT

1. MEDICAL ASPECTS

John Tilden Howard, M.D.

Baltimore

10:30 RECESS

10:50 2. SURGICAL ASPECTS

Arthur M. Shipley, M.D., F.A.C.S.

Head, Department of Surgery, University of Maryland, Baltimore

11:20 CANCER OF THE BREAST

Frank E. Adair, M.D., F.A.C.S.

Associate Professor of Clinical Surgery, Cornell University Medical College, New York

FRIDAY, OCTOBER 6—AFTERNOON SESSION

RECENT DEVELOPMENTS IN MEDICINE—II

2:15 PANEL DISCUSSION ON CHEMOTHERAPEUTIC DRUGS ("Sulfa" drugs, Penicillin, Thyrotricin)

Chester S. Keefer, M.D., F.A.C.P., Moderator

Director, Evans Memorial Hospital; Physician-in-Chief, Massachusetts Memorial Hospital, Boston

Lt. Colonel Michael E. DeBakey

Medical Corps, U. S. Army; Chief, General Surgery Branch, Surgery Division, Office of the Surgeon General

Lt. Commander Adolph M. Hutter

Medical Corps, U. S. N. R., National Naval Medical Center, Bethesda, Md.

Lt. Commander Edwin E. Barksdale

Medical Corps, U. S. N. R., National Naval Medical Center, Bethesda, Md.

3:15 RECESS

3:35 THE DYSENTERIES

Lt. Commander Francis S. Cheever

Medical Corps, U. S. N. R., U. S. Naval Medical School, Bethesda, Md.

4:05 PRESENT CONCEPTS OF MILITARY SURGERY AS DEVELOPED IN THE EUROPEAN THEATRE

Major General Norman T. Kirk

Surgeon General of the Army

4:35 RECENT ADVANCES IN LABORATORY DIAGNOSIS

Frank W. Konzelmann, M.D.

Professor of Clinical Pathology, Temple University, Philadelphia

THE MEDICAL SOCIETY OF THE

Home of the Medical Society

SATURDAY, OCTOBER 7—MORNING SESSION

MEDICAL CARE FOR VETERANS AND CIVILIANS—I

PANEL DISCUSSION ON THE FUTURE OF MEDICINE

United States Public Health Service

9:15 **John P. Peters, M.D.**
Professor of Medicine, Yale University School of Medicine

9:35 **The Honorable Walter H. Judd**
Congressman from Minnesota

9:55 RECESS

10:15 **Vice Admiral Ross T. McIntire**
Surgeon General of the Navy

10:35 **The Honorable Claude D. Pepper**
United States Senator from Florida

10:55 **Thomas Parran, M.D.**
Surgeon General of the U. S. Public Health Service

11:15 **John H. Fitzgibbon, M.D., F.A.C.P.**
Chairman, Council on Medical Service and Public Relations, American Medical Association

SATURDAY, OCTOBER 7—AFTERNOON SESSION

MEDICAL CARE FOR VETERANS AND CIVILIANS—II

2:15 EXPERIMENTS IN MEDICAL CARE
Norman M. Scott, M.D., F.A.C.S.
Medical Director, Medical Service Administration of New Jersey

2:45 REHABILITATION OF VETERANS
Major Charles R. Brooke
Medical Corps, Medical and Hospital Service, Veterans Administration

3:15 RECESS

3:35 THE NATIONAL PROGRAM FOR PHYSICAL FITNESS
Colonel Leonard G. Rowntree
Chief, Medical Division, National Headquarters, Selective Service System, Washington

4:05 RECONDITIONING IN CIVILIAN HOSPITALS
Major Henry B. Gwynn
Medical Corps, U. S. Army, Office of the Surgeon General

4:25 THE CAUSALGIC STATE IN PEACE AND WAR
Géza de Takats, M.D., F.A.C.S.
Associate Professor of Surgery, University of Illinois College of Medicine, Chicago

Walter Reed General Hospital

Scientific and Rehabilitation Exhibits

The Scientific and Rehabilitation Exhibits will be shown in the Chinese Room, the Pan American Room and the Seventeenth Street Parlor at the Mayflower Hotel. Motion pictures will be on display in the North Room. There will be a continuous showing of films on various scientific subjects.

SCIENTIFIC EXHIBIT

Subject	*Sponsors*
The Treatment of Minor Burns	American Medical Association
Review of Recent Developments in the Clinical Laboratory	Richard S. Kelso, M.D.
Studies of Vitamin C Deficiency	Joseph H. Roe, Ph.D., and Ira R. Telford, Ph.D.
Protein Metabolism; Preparation of Plasma by Sedimentation: A New Method	Charles Stanley White, M.D., and Jacob J. Weinstein, M.D., George Washington University School of Medicine and Gallinger Municipal Hospital
Parasitology and Tropical Diseases	Eugene R. Whitmore, M.D., Department of Parasitology and Pathology, Georgetown University School of Medicine, and Doctors Hospital
Thromboangiitis Obliterans (Buerger's Disease)	Emil J. C. Hildenbrand, M.D.
Lesions of the Vulva	C. K. Fraser, M.D., and John Parks, M.D., Departments of Obstetrics and Gynecology, George Washington University School of Medicine and Gallinger Municipal Hospital
Child Guidance (from Children's Hospital Clinic)	Leonard M. Dub, M.D.
Minimum Scarring in Abdominal Surgery	Oliver C. Cox, M.D.
Pathology and Medical Illustration in World War II	Colonel J. E. Ash, Army Institute of Pathology, Army Medical Museum, Office of the Surgeon General, United States Army
Ultraviolet Blood Irradiation Therapy	G. J. P. Barger, M.D., Physical Therapy Section, Georgetown University Hospital
The U. S. P. XII Reflects Medical and Pharmaceutical Progress	American Pharmaceutical Association
Wartime Graduate Medical Meetings, Clinics, Demonstrations	James Alexander Lyon, M.D.
Diagnostic Exhibit on Congenital and Other Unusual Cardiac Conditions; Statistical Study on Rheumatic Fever	The Washington Heart Association
Psychosurgery	Walter Freeman, M.D., and James W. Watts, M.D.
Results of Psychotherapy, Series II	Benjamin Karpman, M.D.

REHABILITATION EXHIBIT

Subject	*Sponsors*
Convalescent Training Program in Army Air Forces	Office of The Air Surgeon
Physical Rehabilitation	Office of the Surgeon General, United States Army
Rehabilitation	Bureau of Medicine and Surgery, United States Navy
Peripheral Vascular Disease	Veterans Administration
Rehabilitation A. Vocational Rehabilitation for Disabled Civilians B. Combined Medical Program—War Shipping Administration and the United Seamen's Service	United States Public Health Service

Rehabilitation of the Tuberculous Patient	Claudia Galiher, Director of Research and Exhibits, District of Columbia Tuberculosis Association

MOTION PICTURES

Group Therapy	Veterans Administration
Modified Manchester Operation for Procidentia Uteri	Read N. Calvert, M.D.
Two Stage Operation for Diverticulum of Esophagus	Read N. Calvert, M.D.
Prefrontal Lobotomy Technic	Walter Freeman, M.D., and James W. Watts, M.D.
Out of Bed and Into Action	Medical Corps, United States Army
Ultra Violet Blood Irradiation Therapy	G. J. P. Barger, M.D.
Surgical Treatment of Congenital Pyloric Stenosis	E. A. Cafritz, M.D.
Electroshock Therapy	Winfred Overholser, M.D.
Pressure Treatment of Burns	Philip A. Caulfield, M.D.
Diagnosis of Peripheral Vascular Disease	Emil J. C. Hildenbrand, M.D.
Mind in the Making	Veterans Administration
Plastic Surgery in Wartime	British Information Services
Health in War	British Information Services
Man Wounded	British Information Services
A Letter from Ireland	British Information Services

Technical Exhibit

The Technical Exhibit will, as in former years, be on display in the Promenade of the Mayflower Hotel. Thirty-five firms will participate. They are as follows:

American Hospital Supply Corporation	(Booth 36)
American Safety Razor Corporation	(Booth 23)
D. Appleton-Century Company	(Booth 24)
Beuchler's	(Booth 4)
Bilhuber-Knoll Corporation	(Booth 31)
Borden Company	(Booth 3)
Burroughs, Wellcome & Company	(Booths 34 and 35)
Camel Cigarettes	(Booths 15 and 16)
Ciba Pharmaceutical Company	(Booth 19)
Credit Bureau	(Booth 18)
Doak Company	(Booth 11)
Doho Chemical Corporation	(Booth 7)
Fleet, C. B., Company	(Booth 29)
Gibson Company	(Booth 28)
Haskell, Charles C., & Company	(Booth 27)
Kloman Instrument Company	(Booth 1)
Liebel-Flarsheim Company	(Booth 20A)
Lilly, Eli, & Company	(Booth 6)
Mallinckrodt Chemical Works	(Booth 38)
Maxwell & Tennyson	(Booth 2)
Mead Johnson & Company	(Booth 10)
Merrell, Wm. S., Company	(Booth 17)
Parke, Davis & Company	(Booth 30)
Peoples Drug Stores	(Booth 25)
Philip Morris & Company, Ltd.	(Booth 32)
Saunders, W. B., & Company	(Booth 5)
Sharp & Dohme	(Booth 33)
Smith, Kline & French Laboratories	(Booth 37)
Spencer, Inc.	(Booth 20)
Squibb, E. R., & Sons	(Booth 8)
U. S. Vitamin Company	(Booth 21)
Walker Vitamin Company	(Booth 26)
White Laboratories	(Booth 9)
Wyeth, John, & Company	(Booths 12, 13 and 14)
Young, F. E., & Company	(Booth 22)

Registration

Mayflower Hotel

Arrangements have been made to facilitate registration of members of the Society by registering those who find it convenient at the Medical Society's office from 2:00 to 5:00 p.m. on Wednesday, October 4. Registration will begin at the Mayflower Hotel at 8:30 a.m. on Thursday, October 5, for members of the Society, physicians in the military services and out-of-town guests. Special provisions have been made for registering dentists, nurses, pharmacists, residents, interns, medical students and others who wish to attend some of the sessions. No one will be admitted to the scientific sessions without a badge which, together with the official program, is obtainable at the registration desk.

All who register prior to 10:00 a.m., Thursday, October 5, will be given a ticket for the Thursday luncheon. There will be no charge to members of the Society. Out-of-town physicians and other non-members of the Society will be required to pay a registration fee of $3.00, which will include a ticket to the luncheon. Physicians in the military services will be registered without charge; however, their registration will not include a luncheon ticket. Tickets for the luncheon may be purchased by non-members of the Society for $1.50. Tickets for the luncheons to be given by the George Washington University Medical Society and the Georgetown University Medical Alumni Association can also be obtained at the registration desk.

Synopsis of Program

(*All meetings at the Mayflower Hotel*)

THURSDAY, OCTOBER 5, 1944

9:00 A.M.–11:40 A.M.: Scientific Program
12:15 P.M.–1:30 P.M.: Medical Society Luncheon, Grand Ballroom
SPEAKER: COMMODORE ARTHUR W. CLARKE, D.S.O., Royal Navy; Chief of Staff to Admiral Sir Percy Noble, Head of the British Naval Delegation in the U.S.A.
SUBJECT: "Maintaining Morale in Fighting Men at Sea"
2:15 P.M.–5:00 P.M.: Scientific Program
7:00 P.M.: Medical Women's Dinner, Sapphire Room
8:00 P.M.: **SPECIAL.** Rehabilitation Exhibit, open to physicians, their families and friends.

FRIDAY, OCTOBER 6, 1944

9:15 A.M.–11:50 A.M.: Scientific Program
12:15 P.M.–1:30 P.M.: Georgetown University Medical Alumni Association Luncheon, Grand Ballroom
SPEAKER: MAJOR GENERAL DAVID N. W. GRANT, The Air Surgeon, Army Air Forces
SUBJECT: "Aviation Preventive Medicine"
2:15 P.M.–5:00 P.M.: Scientific Program
8:30 P.M.: Public Meeting, Grand Ballroom
NATIONALLY KNOWN SPEAKER TO BE ANNOUNCED

SATURDAY, OCTOBER 7, 1944

9:15 A.M.–11:45 A.M.: Scientific Program
12:15 P.M.–1:30 P.M.: George Washington University Medical Society Luncheon, Grand Ballroom
SPEAKER: WILLIAM MATHER LEWIS, LL.D., President, Lafayette College
2:15 P.M.–5:00 P.M.: Scientific Program
8:00 P.M.: MEDICAL OFFICERS' NIGHT. Special Program and Entertainment

President's Page

LET IT NOT BE SAID, WE FAILED

During my few months in office I have come to realize that the medical profession is in danger of losing its greatest opportunity. The reason seems to me quite obvious. Although doctors have been aware of the controversy involving the adequacy of the present methods of providing medical care, most of them are vague on the subject. It should not be necessary to point out that in as critical period as this physicians should know the facts. Unless this situation is remedied the medical profession may have little to do with the shape of things to come in the field of health. The question which each physician might well ask himself is, "Am I sufficiently well informed to express myself intelligently on the course which medicine should pursue in a changing world?"

As some of you know, I have been a regular attendant at meetings of our Executive Board despite the fact that I am on military duty. I have heard many reports made by the Secretary on recent medical legislation and plans which are being made for the future. Discussion has brought out the fact that books, studies, reports and other material have been made available to committees of our Society dealing with these matters. It occurred to me that this fact should be made known to our members and that they should be encouraged to inform themselves. I have asked that the Secretary supply such documents as are requested. It will be of considerable interest to me to learn how many of our members avail themselves of this opportunity.

I would suggest that physicians read arguments for and against more Government in medicine. Much of this material can be found in back issues of the Medical Annals. For example, the editorial columns of the August issue of the Annals contains views of medical leaders and public officials. Those who have not done so should also read the Report of the Committee on the Costs of Medical Care. Most of the discussion today stems from this study which was made a decade ago. Physicians can study with profit documents dealing with voluntary and compulsory sickness insurance, group practice and medical economics prepared by the Bureau of Medical Economics of the American Medical Association. There are also surveys which have been made by the Division of Health and Disability Studies, Bureau of Research and Statistics of the Social Security Board. These are just samples of the material available to physicians.

I have a feeling that many of you will receive these suggestions without great enthusiasm. Some will undoubtedly be indifferent. But I say to you most earnestly, let it not be said we failed to do our duty when there was time.

In line with what I have written, I must not forget to mention the Panel Discussion on the Future of Medicine to be held on the last day of the 16th Annual Scientific Assembly. Every physician in Washington should be present. He will be given something to think about.

Editorials

A PREVIEW OF POSTWAR MEDICINE

As a number of physicians have reminded the Committee on Arrangements for the 16th Annual Scientific Assembly, the theme this year, "A Preview of Postwar Medicine," is a most ambitious one. Any meeting, they say, which lives up to such a theme will be "tops."

The fact is that this year's Assembly will be most unusual in many respects. Not only are the speakers on the scientific program the best obtainable but the exhibits to be shown cannot be duplicated by any state medical society in the country.

Emphasis will be placed on rehabilitation. The Army, Navy, Army Air Forces, Public Health Service and Veterans Bureau as well as local physicians and medical institutions have indicated that they will present exhibits. Undoubtedly these will attract wide attention and be a source of great interest to members of the Society, visiting physicians and guests.

A portion of the program which every physician will wish to hear is the Panel Discussion on the Future of Medicine. Medical leaders known throughout the country will participate.

A special effort is to be made this year to increase the attendance of members of the Medical Society. In previous years it has run between 50 and 70 per cent. It is the feeling of the General Chairman and his Committee on Arrangements that at least 80 to 90 per cent should register. Every effort will be put forth to make the attendance in so far as District physicians are concerned the highest in the Assembly's history.

Aside from Society members, invitations will be extended to several thousand physicians in nearby Maryland, Virginia, West Virginia, Pennsylvania, New Jersey and Delaware. In addition several hundred Army and Navy medical officers will be invited. Last year the Assembly, from the standpoint of attendance, hit the high water mark.

It is not too early now for members of the Society to make their plans to attend the Assembly. These are busy days and appointments should be arranged so that they will not interfere with attendance. Examine the program which will be found elsewhere in this issue of the Medical Annals. Note the sessions you plan to attend on your calendar now.

WHAT IS A NORMAL HEART?

The recently published "War Number" of the *American Heart Journal*[1] emphasizes some of the difficulties inherent to the problem of deciding whether or not the heart is normal in certain cases. The importance of making such a decision accurately is equally great in both civilian and military practice, although the effects of erroneous decisions are somewhat different.

In military medicine the physician is primarily concerned with the exclusion from military service of candidates with heart disease, in order to reduce the number of potential medical casualties and lighten the load of pensions for illness ostensibly developed during service. On the other hand, great care must be taken that manpower should not be wasted by exclusions based on erroneous diagnosis of heart disease. Obviously, two errors are possible: a heart that is normal may be thought to be diseased, and a diseased heart may escape detection. Both errors are not at all uncommon. Thus the reports[1] of the experts in cardiovascular disease appointed to special boards for the reëxamination of men rejected for military service by local boards and induction stations because of the diagnosis of cardiovascular defects or neurocirculatory asthenia are illuminating. About 5,000 men were reëxamined in five cities with the result that 17.3 per cent were resubmitted as 1 A. There was an additional sizable percentage (11.4 per cent in Boston) classed as "borderline cases" and not resubmitted, although it remained uncertain that cardiovascular disease existed in these cases. There are no strictly comparable data to indicate the frequency with which heart disease escapes detection. However, the report of Delaney et al[2] is interesting in this respect. In the examination of a large number of men aged 18 to 27, approximately 2 per thousand were found to have organic valvular disease, previously unrecognized in spite of the fact that they had all been subjected to two or more careful physical examinations.

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[1] Am. Heart J., 1944, 27, 433.

In civilian practice the problems with respect to the decision as to the normalcy of the heart in a given case are somewhat different. Although accuracy in diagnosis is always desirable, there are many "borderline cases" as well as cases of heart disease, organic valvular disease in particular, in which recognition of a cardiac defect is of much less immediate importance than in military medicine. As a matter of fact, some cases of cardiac neurosis have such an insignificant organic component that we can be readily convinced that they would have been better off never to have seen a physician.

In civilian practice, furthermore, a great deal more harm to the individual may result from the error of considering a normal heart to be diseased. This kind of mistake often leads to unnecessary alterations in a patient's mode of living and to a highly undesirable transformation of his attitude toward life. This is especially true when a diagnosis of coronary artery disease is erroneously made. There is no way to discover how frequently this happens, but apparently it is not infrequent and is often the result of inept evaluation of electrocardiographic study. Sprague[3] has stated that the electrocardiograph is commonly supposed to possess a prescience in the discovery of coronary pathology superior to any other technic and has urged a vigilant skepticism in the interpretation of equivocal electrocardiograms. The fact is that we are still too uncertain about the range of variation of the normal electrocardiogram to permit us to be dogmatic. This idea is reaffirmed by the reports of Stewart and Manning[4] and Graybiel and his co-workers[5] on the analysis of electrocardiograms of healthy young men. Both groups of authors report to the effect that the range of variation of "normal" electrocardiograms is considerably greater than has been accepted. A relatively large number of records showed characteristics which hitherto have been considered diagnostic of heart disease.

Most of the difficulties in decision as to whether or not the heart is normal arise from gaps in our knowledge, which can be filled only by long-term studies of groups of doubtful cases, and from inadequacies of technic. These latter can be overcome to some extent by better application of known methods and by recognition of their limitations. Until our total knowledge has increased an attitude of humility is desirable.

H.H.H.

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[2] Delaney, J. H., Miller, S. I., Kimbro, R. W., and Bishop, . F.: J. A. M. A., 1943, 123, 884.

[3] Sprague, H. B.: Modern Concepts of Cardiovascular Disease, 1941, 10, No. 10.

[4] Stewart, C. B., and Manning, G. W.,: Am. Heart J., 1944, 27, 502.

[5] Graybiel, A., McFarland, R. A., Gates, D. C., and Webster, F. A.: Ibid., 1944, 27, 524.

THE AGE FACTOR

The wandering physician observing the proceedings of the House of Delegates of the American Medical Association may be changed into a wondering inquirer. His peripatetic delving may leave him with a number of unanswered Why's.

Why is it that doctors can say that the A. M. A. does not represent them? The House of Delegates is presumed to be a deliberative body and passes on policies which are supposed to control its Board of Trustees, its elected officers and its employed staff. Why do speakers at the sessions plead for "unity"? Why does no one mention removing causes of disunity? Why are member physicians so generally critical of the public policy of their own necessary and important organization?

About this time the wanderer's mind really begins to wander and he begins to scribble figures aimlessly on paper. Out of such a gestation were born the tables appended to these lines.

The position of Delegate to the American Medical Association is the most important office within the gift of a medical society, and local offices fade somewhat by comparison with it. Through the delegate the members have their most important avenue of self-expression on the national scene. Through him they hope to voice their sentiments and cast their votes. By his actions will all of medicine be praised or damned.

Conversations with other confused physicians in and from many different parts of the country bring forth such expressions as these: "Well, he was a nice fellow and they wanted to do something for him." "He had been a loyal organization worker for many years (and how!) and he deserved it." "Out our way the political hacks get all the offices."

Observation of the weight of the proposals coming to the House for action leads to the belief that delegates should be selected from the brightest, the ablest, the most active, the most farsighted within the ranks of the profession.

The question of age introduced by the tables may not be in point. The tables speak for themselves. They do not say that men in their more mature years may not fill the qualifications mentioned above. Men of such years as a rule, however, did their most able work in an earlier and more comfortable day. It may be observed that as our years ripen and our judg-

(*Contined on page 346*)

TABLE 1

Number and percentage of members of House of Delegates by age groups, 94th Session, A. M. A., 1944*

AGE GROUP	NUMBER OF DELEGATES	PERCENTAGE
81	1	0.59
75–79	8	4.71
70–74	17	10.00
65–69	20	11.76
60–64	35	20.59
55–59	42	24.71
50–54	26	15.29
45–49	13	7.65
40–44	5	2.94
36–39	3	1.76
Total..........	170	100.00
60 and up	81	47.65
50–59	68	40.00
Under 50	21	12.35
Total..........	170	100.00
55 and up	123	72.35
Under 55	47	27.65
Total..........	170	100.00

* Make-up of House of Delegates is as published in the *American Medical Association Daily Bulletin, Ninety-fourth Annual Session,* June 14, 1944.

Ages are those the individuals attain on their 1944 birthdays. Birth years were found in the American Medical Association Directory, 1942. One Massachusetts delegate's listing gave only year of graduation from medical school (1892); year of birth was estimated at 1872. A similar case from New York gave graduation year (1903); birth year was estimated at 1882. If these two are in error, the error is probably toward ages less than the real ages.

No delegates were listed from Nevada or New Mexico; or from Alaska, the Philippine Islands, or the Virgin Islands.

TABLE 2

*Age of 170 members of House of Delegates, A. M. A., 94th Session, 1944**

DELEGATION	NO. OF DELEGATES	RANGE OF AGE	AVERAGE AGE OF DELEGATION
Alabama	2	63–64	63.5
Arizona	1	44	44.
Arkansas	2	50–55	52.5
California	8	41–78	57.6
Colorado	2	65–71	68
Connecticut	3	52–58	55.3
Delaware	1	63	63.
Dist. of Columbia	1	60	60.
Florida	2	46–56	51.
Georgia	3	55–72	66.
Idaho	1	59	59.
Illinois	9	54–75	62.3
Indiana	4	42–64	56.
Iowa	3	59–62	61.
Kansas	2	59–69	64.
Kentucky	2	48–63	55.5
Louisiana	2	57–66	61.5
Maine	1	56	56.
Maryland	2	74–76	75.
Massachusetts	6	52–72	64.3
Michigan	5	57–70	60.8
Minnesota	4	54–69	62.
Mississippi	2	62–66	64.
Missouri	4	53–76	65.8
Montana	1	68	68.
Nebraska	2	58–59	58.5
New Hampshire	1	48	48.
New Jersey	5	36–79	58.6
New York	20	48–75	62.
North Carolina	2	52–65	58.5
North Dakota	1	55	55.
Ohio	8	45–75	55.2
Oklahoma	2	51–67	59.
Oregon	1	48	48.
Pennsylvania	11	39–71	58.5
Rhode Island	1	59	59.
South Carolina	1	51	51.
South Dakota	1	64	64.
Tennessee	2	53–61	57.
Texas	5	37–72	60.2
Utah	1	71	71.
Vermont	1	53	53.
Virginia	2	56–61	58.5
Washington	2	52–61	56.5
West Virginia	2	55–62	58.5
Wisconsin	3	52–67	58.7
Wyoming	1	81	81.
Hawaii	1	52	52.
Puerto Rico	1	46	46.
Canal Zone	1	41	41.
Scientific Sections	16	45–70	55.7
Gov't Services	3	56–66	59.7
Total	170	36–81	59.4

* See footnote to Table 1.

TABLE 3

*Ages of Officers of A. M. A., 1944**

TITLE	NAME	AGE
Retiring President	James E. Paullin	63
Incoming President	Herman L. Kretschmer	65
President Elect	Roger I. Lee	63
Vice-President	Stanley J. Seeger	57
Treasurer	J. J. Moore	58
Secretary and General Manager	Olin West	70

*Ages of Trustees of A. M. A.**

NAME	1943–1944 AGE	1944–1945 AGE
Ernest E. Irons	67	67
William F. Braasch	66	66
Roger I. Lee	63	
Elmer L. Henderson	59	59
Ralph A. Fenton	64	64
James R. Bloss	63	63
Charles W. Roberts	61	61
Roscoe L. Sensenich	62	62
Edward M. Pallette, Jr.	70	70
Louis H. Bauer		56
Average Age of Trustees	63.9	63.1

* See footnote to Table 1.

ment gains from experience, we may at the same time gradually get more and more out of touch with the current scene and most certainly we find it more and more difficult to accept change and to participate in it. We keep hoping against hope that we will return to the good old days and deluding ourselves with the mirage of "things as they were."

The tables say that nearly half of the delegates are 60 years of age or more; while about one-eighth are less than 50 years of age. Or to look at it another way, over 72 per cent are 55 years or over, and the remainder are under these years. One state was represented by only one delegate, age 81; another was represented by only two delegates, ages 74 and 76.

The Board of Trustees had an average age of 63.9; at this year's session one member was succeeded by a younger man so that the average age is now 63.1, and they escape the Rooseveltian epithet, "the nine old men." It would be interesting to know how this compares with the average ages of boards of directors of important and active corporations.

There are practical difficulties in the way of letting "youth have its fling." Men of the younger groups are generally the most active in clinical matters; they are busy writing scientific papers, teaching, and building up their economic stability. Possibly only men who have lived longer and have already established their future can take the time for important organization work. There can be no question that the members of the Board of Trustees have given enormous amounts of time and faithful and loyal service to the American Medical Association, and all honor should be to them for these efforts. The delegates, too, deserve credit for their great and sincere labors.

After all, about all this writing accomplishes is to put younger physicians on notice that their services are needed definitely and actively in their national organization and to urge their elders to put them in positions of responsibility and trust.

H. P. R.

REHABILITATION—AN ASPECT

Much is being heard, and will continue to be, concerning rehabilitation of the disabled veteran. The word, which seems to be loosely and widely applied, is really one of comprehensive meaning. According to the Century Dictionary, it means "to restore formally to a former capacity or standing." It is thus applicable to medical, economic and social restoration—a wide scope indeed!

The most common application nowadays is the medical one—too often limited to orthopedic and surgical conditions. Many states have laws relative to "rehabilitation," but in many instances they have provided only for prostheses, braces or other apparatus.

The recent Act authorizing the Federal Security Agency to make grants-in-aid to state rehabilitation programs indeed was one of the first bits of legislation to refer to rehabilitation without the limiting adjective "physical."

The Congress has been generous indeed in its provision for the restoration of veterans, and a complicated mechanism has been set up to make it effective; let us hope that by its very complication it will not fail of its intended purpose!!

One of the largest groups of disabled veterans will be those discharged by reason of neurologic or psychiatric disabilities, or to use the awkward and poorly constructed word, neuropsychiatric. Figures already published indicate that fully a quarter million men have been discharged for disabilities of this nature, and despite the present readiness of the armed forces to treat patients of this type and retain them in service, many are still being returned to the community.

Relatively few of these men are psychotic, that is, so deranged as to call for treatment in a mental hospital; such psychoses as develop in a military setting tend to have a favorable prognosis, and so most of these men are returned home well. The bulk of the discharges (about three fourths) are for one manifestation or another of psychoneurosis, usually of the anxiety type or of a type in which physical symptoms (particularly gastrointestinal or circulatory) predominate. In nearly all these cases the stress of military life was a large factor in causation, and the return to civil life is more than likely to ameliorate or remove the symptoms. In any event, the neurotic is in good touch with his situation, is orderly and well behaved, and in no event should be considered to be a menace or "insane."

What the dischargee, whatever his disability, needs is understanding, sympathy (but not pity), and a chance to be self-supporting. The attitude of employers toward the discharged psychiatric patient should be as tolerant and helpful as toward the blind or crippled. This is a message which every physician can help to carry to prospective employers; by doing so he will contribute toward a more effective restoration of a large group of men who can serve their employers and the community well.

W. O.

In and Out of Focus

BY THE OBSERVER

The Doctor as Teacher

How much medical knowledge should be imparted to laymen? Dr. Karl Schaffle of Asheville, North Carolina, believes that they should be told the exact nature of their afflictions and, if necessary, the unsatisfactory prospect from the standpoint of treatment. We quote the following from an address which was published in the July number of *Southern Medicine and Surgery*:

> "The layman reads the columns in the newspapers and occasional articles in the popular magazines by medical writers, most of which are sound. . . .The layman also sees news items at times (which should have been submitted to a medical censor), the sensational character of which is often misleading. He may also read such books as those by Paul DeKruif whose laudable intention to make science interesting is sadly marred by a hysterical style, causing unfortunate morbid introspection, with alarming phobias and nervous insomnia on the part of some of his readers. Recently there appeared in that widely distributed, reactionary, short cut to culture, the *Reader's Digest*, an article by DeKruif on the treatment of arthritis by vitamin D, the value of which has been questioned by the very men who conducted the experiments, and who greatly resented the gratuitous publicity. This was closely followed in a subsequent issue of the same periodical by another essay entitled 'New Hope for White Plague Victims,' concerning a product for the treatment of tuberculosis in man, the results of which have not been reported in medical literature. It has certainly been a plague to all chest specialists, the victims of much anxious inquiry by their patients, their relatives and friends! Again, the experimenter was obliged to write a letter to the *Journal of the A. M. A.*, explaining that 'diasone is still an experimental agent and is not ready for distribution until a great amount of investigational work is completed.'
>
> "Patients also attend certain health clinics and resorts where they are inculcated in the virtues of vegetarianism, put through strenuous exercise, and given frequent formal lectures on 'how to keep well.' Here again the intention is laudable but the results are frequently deplorable in the manufacture of what have long been known as 'Sanatorium Cranks.' "

Speaking of the doctor's responsibilities in this situation Dr. Schaffle says: "As you all know the word 'doctor' means literally leader or teacher and of course is applied to other professions than the medical. Its most common application in this country, however, is to the physician. The question which I wish to raise is whether the medical profession as a whole lives up to this title. In the rush of days and nights crowded by many demands and the inevitable routine which becomes a self-protective mechanism, there is little time or effort for much teaching even of the most informal type . . .

"Of the three old, so-called learned professions, the medical is the least vocal. An important function of both minister and lawyer is the preparation and delivery of addresses to assemblies of people, while the average physician is notoriously a poor public speaker. . . . I am not so much concerned, however, with lectures by physicians, such as the public addresses of health officers and professors of medicine, as with the kind of teaching which we give or fail to give to our individual patients. There are certain specialties in which this is imperative—psychiatry, pediatrics, orthopedic surgery, cardiology, tuberculosis and diabetes. But with most of us it is a matter of getting to the office a little late because of some professional or domestic emergency, to find an air of impatient expectancy in the waiting room, whose occupants must be 'run through' rapidly in order to reach the hospital or sanatorium, where hurried rounds are made and most of the instruction is delegated to nurses! A greeting, a few questions, a brief examination, a hastily written prescription or the reaching for a handy sample left by a detail man, a few trite remarks and each, in turn, is disposed of! Have we taught them anything? No wonder they change doctors, to go through the same thing again! On the other hand there are many persons to whom 'a little wisdom is a dangerous thing.' A few years ago a big, red-faced man asked me to take his blood pressure. He was a physician. As he sat by the machine he said, 'You notice I am not looking at it and I am not asking you what it is. It's too bad the damn thing was ever invented! It has caused more unnecessary worry than anything I know. If you want me to do anything beside cutting out my smoking, drinking and swearing, which I won't, just say so.' Then he said, 'I used to know an old country doctor who would examine a patient and when the family crowded around to ask what was wrong, he would look at them over his glasses and say, "Well, he is sick—*sick!*" And as he reached into his bag, they would ask, "What are you going to give him, Doc?" He would give them another solemn look and say, "I am going to give him some medicine—*medicine!*" And he had no neurotics cluttering up his office and wasting his time.'

"Along with such evasion is the old, old question—is a lie justifiable? We often wonder how much truth there may be in the most sober official pronouncements of the preachers and the lawyers, and many persons take it for granted that the gentle art of prevarication is an essential part of the doctor's stock in trade.

"Often we are unconsciously insulted by patients or their relatives who ask, 'Are you telling me the truth?' Alvarez, in his recent book, describes how he leaves his records in plain sight of such doubters while he steps outside for a few minutes!

"I was once associated with a very prominent practitioner who used charts for recording the results of his examinations. These contained a line for the diagnosis, another for the prognosis and a third for the opinion expressed to the patient. On some of these charts there was an obvious discrepancy and I noted in such cases that after the notes on the third line were the initials 'e.j.m.' I asked him what they meant. He said 'end justifies means. If I told them that the outlook was so unfavorable they would lose hope and give up the fight.' But this did not appeal to me, whose histrionic abilities atrophied after high school. (I once tried the back-slapping 'cheerio' technic on a hopeless case by saying, 'Never mind, old man, we'll soon straighten you out!' My voice must have had a hollow, hypocritical ring, for the patient looked up and with the grim irony of which the German Jew is master, replied with a sardonic smile—'I know, doctor, you'll straighten me out, all right and soon'—and we did!) As a beginner in the State Tuberculosis Dispensary in Philadelphia in 1909, I was taught by Alfred Stengel, who was then in charge, to tell patients the truth, even if unpleasant, in order to gain their complete coöperation toward possible improvement; or if the prognosis were bad to allow them to make the necessary social and economic adjustments, which if neglected, renders the inevitable tragedy still more tragic. But a great deal depends upon how it is done. Joking aside, there is such a thing as pulling the trigger gently. Fortunately, people now are generally more frank than those of previous generations. Hospitals are not dreaded as they once were and even the words cancer, syphilis and insanity are not spoken with the bated breath our parents used. . . .

"We should remember the origin and the literal meaning of the term 'doctor'—teacher or leader—and not neglect our ancient function of imparting instruction."

Your Observer agrees with Dr. Schaffle that ordinarily patients should have explained to them the nature of their disease and the probable prognosis. However, where incurable maladies are concerned, he is not sure. There is plenty of room for argument on this point. It is doubtful if in all instances "there is such a thing as pulling the trigger gently" without demoralizing the patient.

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On Physical Fitness Considering the time of year and that those holding positions of responsibility are very busy, there was a surprisingly large attendance at the meeting of the Joint Committee on Special Emphasis for Physical Fitness held in Washington on July 27 and 28.

A week previous to the meeting the *Journal of the American Medical Association* had carried Colonel Leonard G. Rowntree's address on "National Program for Physical Fitness" delivered at the annual meeting of the A. M. A. in June and had commented favorably in its editorial columns on the program proposed.

Colonel Rowntree pointed out that in the past four years some 33,000 physicians in this country had completed 13,000,000 examinations. "While the primary objective of these examinations was for the selection or rejection of men for the military service," Colonel Rowntree said, "there has emerged as a by-product a picture of the health needs of the Nation. The knowledge of the medical profession about the physical state and health of the American people has been widened and deepened by the Selective Service experience. Perhaps in no other way could this end have been obtained. The medical profession, in doing this work itself, has itself acquired the knowledge, has revealed the national needs, and now it must come forward with a program to meet these needs."

Colonel Rowntree reviewed in some detail what Selective Service had learned about the health of American youth, the efforts made to rehabilitate defectives, and concluded with a plea for a constructive physical fitness program. He says, "The amazing conditions revealed by the Selective Service statistics, as to the physical fitness of the Nation, is a challenge to the medical profession particularly and to all interested in national health and national morale, and in the future of the Nation and its youth. The conditions call for both a remediable and a preventive program."

The *Journal of the American Medical Association* editorialized:

> "Not all of those . . . rejected can be made fit even by the application to the problem of everything that medicine now knows. About 35 per cent of the total were rejections for mental disease, mental deficiency, including illiteracy, and neurologic disorders. However, a deduction of about 1,500,000 men in these categories would still leave about 2,500,000 who could be benefited by the application of proper medical treatment. Many of them could be made to meet the needs of the armed forces."

The *Journal* stated that the Board of Trustees of the A. M. A. with the approval of the House of Delegates authorized participation of the Association in a joint committee on which it and the National Committee on Physical Fitness would be represented. The Committee had been "charged with development and operating a program for improving physical fitness throughout the Nation during the year beginning September 1." The *Journal* explained that such a program would include the "evaluation of the physical state of our young men and women and increase the activities and responsibilities of schools and colleges in physical education, also improve opportunities for gaining physical health and enlist the active support of industrial, social, religious, patriotic, professional and other groups."

If the enthusiasm and interest displayed at the recent meeting of the Joint Committee on Special Emphasis for Physical Fitness is a criterion, the Committee is off to a promising start. Whether or not there will be worthwhile accomplishments to its credit depends upon a number of factors. Among these the development of a sound, long-range program under the direction of a capable and qualified executive is, of course, essential. Of equal importance is unflagging interest on the part of all coöperating groups.

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Service vs. Indemnity Medical Plans

There has been considerable discussion within the medical profession as to the respective merits of medical service and medical indemnity plans. In an article, "The Development of Medical Service Plans," appearing in the June issue of the *Pennsylvania Medical Journal*, the cudgel is taken up for the service plans. The following views are expressed:

> "One of the most important developments in the operation of medical service plans deserves much more than the cursory examination it has received thus far. In the majority of nonprofit medical service plans the premium paid by the subscriber calls for benefits in the form of services; in the plans offered by various insurance companies the benefits are in cash. The allowed cash benefits may be paid to the subscriber and then, in theory, paid by him to the physician; or the subscriber may sign an agreement which permits the company to pay the benefits directly to the physician. On first view, it seems to make little difference whether a benefit is received as a service or as cash. But the difference between the two is extreme.
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> "Insurance is supposed to protect people against something specific. What assurance does a subscriber have that a cash payment for a medical service will cover the cost or pay for a specific percentage of it? None. He purchases a contract that provides one hundred dollars for a certain surgical procedure. Not until he needs the operation does he have any idea of what it will actually cost—it may cost the amount or double the amount of his cash benefit. The subscriber may think that the fee should conform to the cash benefit listed in his contract. If he finds that it does not, he is likely to feel cheated. And the result is likely to be antagonism between physician and patient—antagonism which may or may not be justified.
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> "There is also another side of the picture. When people who are insured begin to view medical care in terms of cash values, rather than of necessary services, a new and insidious element is introduced. It will be a sad time for patients and physicians when sickness commands a net cash value instead of treatment according to the patient's needs. How much more satisfactory is the forthright plan that assures the thing for which medical service plans have been devised—services if and when they are needed."

In regard to what the future holds, the *Journal* states:

> "No one can say what will be the pattern of medical practice twenty-five or fifty years hence. The present system may be wholly right, partially right, or wholly wrong, but nevertheless it exists. Rightly or wrongly, the great majority of physicians are averse to becoming salaried employees and they insist that their compensation shall be in the form of fees for the services they render.
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> "Health insurance is in motion and behind it there is a dynamic power that has its source in the increasing public demand for relief from the economic hazard of sickness. There are those who, living in their own little world of absolutes, regard the word 'change' as a synonym for 'calamity.' There are others who see in the demand the possibilities of a quick and complete solution of all our problems of health. But those who have been engaged in translating the public demand into the minute details of organization, administration, and costs for millions of people, have approached the problem with the healthy apprehension and respect which it deserves. The success of their efforts depends very largely upon the support they receive from their associates in the medical profession."

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Medical Care—a Standardized Commodity

"If the day ever comes when medicine is trimmed down to a cheap and prosaic commodity, it will not be necessarily very poor, but by no means will it be very good. It will certainly be very common, and commonness is the one poisonous ingredient which will certainly destroy it as an art." So spoke Dr. Louis J. Karnosh in addressing the graduating class of the Western Reserve University Medical School last October.

Dr. Karnosh was bitter about the attempt to regiment the medical profession. "There is inchoate in the contemporary atmosphere a scheme to make the physician and his art a standardized commodity like baked beans and salted peanuts," he said. "For the social planners are again upon the land to regulate things, to distribute happiness and to assign six morning glories to every front porch. Again there is inchoate a scheme to make life more happy and secure for the 'common man' and to make it economically nice and comfortable for the mass. We hear them talk grandiloquently of the 'Century of the Common Man.'

"What an incongruity! At the same time that the Utopians are groping for a synthetic universal happiness, there exists the dire necessity for desperate national defense, for mass destruction of our enemics, for appalling material waste and wild political disorder. In the din and destruction of bombing, the social engineers are protecting themselves with one hand and with the other they are blithely busy planning a stereotyped happiness and a 'rational' regulation of society.

"What a paradox! There is a drive to regulate the practice of organized, legitimate medicine while hundreds of commercial enterprises are free to sell their headache tablets and carminatives over the radio without stint or economic hindrance. The four freedoms to the dispensers of vitamins, but a sharp regimentation of the physician, of the hospital, and of the cost of legitimate medical care!

"There are certain sound and fundamental reasons for the instinctual distrust of the social planner by the physician—the least of which is his concern over his own economic security. By reason of his knowledge of organic life, the doctor of medicine knows that the social rationalists are anything but rational. The doctor knows that the more significant the culture, and the more natural and sound the social structure, the more it resembles the anatomy of a noble animal or vegetable body and the greater are the differences between its constituent elements."

"Social planners naturally disagree on how to become secure, because at a given moment the word 'security' does not mean the same thing to two people even though they find themselves in the same economic situation. Some call social security 'merely a slice of today's surplus for tomorrow's deficit.' Security certainly offers no freedom from fear and particularly fear of pain, of disease and of the unpredictable and the unknown."

"With all the logical foresight which can be mustered, with all the beautiful paper plans to put medicine on the assembly line, the human emotional experiences of pain, fear of disease and all the sorrows epitomized in 'Ol' Man River' will continue to torment man and to defy regimentation and bureaucratic control."

Another Flying Hazard Conquered

As is well known, air warfare has brought in its wake many hazards which have threatened the efficiency and, in fact, the very lives of intrepid fliers. Many of these have been overcome but not by any means all of them. Perhaps the most common hazard in altitude flying is that of cold. In the July number of *The Military Surgeon*, Air Vice Marshal G. L. Keynes describes how the Royal Air Force beat its "other enemy."

During the early part of the war bomber air-crews of the R.A.F. were in serious danger of frostbite. This was due to the long duration of flights in all kinds of weather and at heights of 15,000 feet or over. Temperatures inside these planes sometimes fell to 20 to 30 degrees below zero, there being no form of interior heating.

Despite these conditions serious frostbites were uncommon. When they did occur it was usually due to failure to follow instructions.

"It was, naturally, fingers that were more liable to suffer frostbite than toes, and the first line of defence lay in the efficient protection of the hands by gloves. It had long been realized that two or three layers of glove were better than one, and many experiments were made to discover the best type of gloves to give the maximum protection.

"Every pilot seemed to have his individual fancy, but it was generally agreed that an inner glove of double-layered silk was of great value, and that this should not be incorporated in the main glove, since it would always wear out and fall to pieces long before the rest. It was also clear that the outer glove should not be too much constricted at the wrist and that fingers should not be tight.

"Fingerless gloves were not favored owing to their clumsiness, but most pilots liked a glove with a muff which could cover the fingers and could alternatively be turned back and clipped onto the back of the hand. Thin smooth leather was not as good as the thicker and rougher kinds. Lambs' wool was found to be the warmest type of lining; and, second to this, woollen "fleece" lining. The difficulty was to strike a balance between efficient protection from cold and loss of freedom of manipulation which must obviously accompany the use of any thick glove.

"It was found that the inner silk glove added only very slightly to this loss of freedom, and that it more than compensated for this by its protective value.

"Aircrews were warned never to remove their gloves, and most members of the crews were able to accustom themselves to working with gloved hands. Sometimes, however, a navigator or pilot found himself in difficulties, and could not believe that any harm would result from the brief removal of a glove in order to write down records, adjust delicate instruments, or handle small control levers. He soon found out how short a period of exposure was needed to cause the frostbite which sometimes followed.

"It was the front and rear gunners who were most exposed to the danger of frostbite, since they had to open their turrets when operating their guns. Even when their turrets were closed it was impossible to exclude all draughts. In addition gunners had to handle bare metal hand-grips in order to operate their turrets, though efforts were made to provide rubber or vulcanite coverings for the grips. After being in action with the enemy the gun sometimes had to be 'stripped' and it needed some little skill to perform this operation with gloved hands, but it was nevertheless often accomplished."

"When the machines were going out on operations it often happened that the crews had very short notice. On these occasions there was much scurrying about at the last moment in full flying kit, so that the men perspired heavily even on the coldest day, and would start their flights in a state of heat and moisture. As the surrounding temperature fell during the flight, the moisture inside gloves and boots condensed and tended to create a clammy coldness of the extremities, thus adding to discomfort the danger of frostbite."

"Other points specially susceptible to frostbite are the tips of nose and ears. These, however, are normally covered during flights by the ear-phones and oxygen mask, so that frostbite of the face was almost unknown."

In describing the manner of combating these hazards, Vice Marshal Keynes says, "Mention of the oxygen mask introduces another factor which is believed to be of importance both in the prevention and treatment of frostbite, namely, inhalation of oxygen.

"If the oxygen concentration is raised to a high level in the alveolar air in the lungs, which can only be achieved by using a valved mask. . .then some dilation of the peripheral blood vessels results.

"The regulation requiring air crews to use their oxygen masks at all heights over 10,000 feet was therefore of great importance for this sometimes introduced a further complication, namely, the difficulty of adjusting oxygen-tube connections with gloved hands. Sometimes gloves were removed in order to do this, with consequent frostbite. It was always remarkable how short a time of exposure to the extremes of low temperature was required to establish a condition of frostbite.

"Other measures designed to combat frostbite were electrically-heated flying suits and chemical hot-packs, to be carried in the pockets of the suits. The hot-packs were, however, liable to become too hot, and it was also inadvisable to apply them to hands which had already been chilled to the point of frostbite. It is well known that too rapid warming of chilled tissues is harmful, but to the lay mind this would seem to be paradoxical, and warnings were likely to be ignored."

"The exhaust gases from the engines were the obvious source of heat, and various devices were tried for distributing warmth throughout the fuselage. One method was the provision of numerous 'hot points' from which warm air was blown out from a pipe running the length of the fuselage. The members of the crew were not always grateful for this, for they stated that the temperature of the air coming from the 'hot points' fell so rapidly that the heat felt cold even a few inches away from the nozzle, and the general sensation was one of further cooling rather than warmth.

"It was also very difficult to convince the rear gunner, isolated in his turret in the tail of the machine, that anything was being done to alleviate his lot. Nevertheless, as new types of machines came into production, methods of warming them and elimination of unnecessary draught became more effective; so that it can be said at the present time that crews during flights are no longer adversely affected by cold, and frostbite has ceased to be a cause of disability in the R. A. F."

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"Fatal Falls from Windows"

One reads frequently in the press about accidental falls from windows resulting in death. Circumstances usually suggest suicide. However, as the *Statistical Bulletin* of the Metropolitan Life Insurance Company points out, it is generally overlooked that purely accidental falls from windows account each year for 500 deaths in the United States. Of this number about 80 per cent occur in homes, especially during the summer months when windows are open.

An examination of the records of 228 deaths by falling out of windows in the years 1940 to 1943 made by the Company's Industrial Department discloses that "Four fifths of the total, 179, were home accidents.... Every age contributed to the casualty list. Children of preschool age made up about one sixth of the total, with a preponderance of mere toddlers 1 or 2 years old. It was quite apparent from the description given of these accidents that parents let children roam around too freely near windows, sometimes with the mistaken idea that screens are sufficient to prevent a child from falling out. According to the records, many of these accidents happened through a youngster leaning against a window screen and toppling out when the screen gave way.

"Persons 15 years old and over were the victims in 145 out of the 179 fatal falls from windows in the home. Twenty-five of these, or about one sixth, met with the mishap while attending to the household chore of washing windows. Sixteen fell from the sill on which they were sitting, with their back turned to the outdoors. Sometimes this happened because a window frame in poor condition, by which they were steadying themselves, gave way. Others fell when momentarily losing their grasp on the window. Some were washing merely the inside of the glass while standing on a ladder, and fell out of the window when they slipped from the ladder or when the ladder swerved.

"Other household chores also involve some risk of falling out of a window. Six in this group of insured fell to their death while hanging clothes out to dry or to air. Three of these lost their footing while attempting to catch a falling clothesline. Four of the accidents happened in removing window screens. Other activities around open windows, that resulted fatally, were: shaking out cloths, hanging curtains while standing on a chair near a window, climbing on the window sill to pull down a shade, and painting or repairing windows.

"Merely opening and closing a window is not without its risk. More than 12 per cent of the deaths among adults occurred while attending to this simple act. A window that sticks badly and suddenly gives way to effort has been the cause of many a fatal fall. Some fell when trying to open or close a window at night while half asleep. In this connection, as well as on general principles, unduly low window sills are dangerous.

"In addition to the variety of circumstances already described there is a long list of situations mentioned as attending the accidents recorded in this insurance experience: lying or sitting on window sills, quarreling and scuffling near open windows, climbing in and out of windows, stepping from one window to another, tripping over objects near windows, mistaking a window for a door, and even sleepwalking.

"In nearly one fifth of the adult cases, mostly among males, intoxication was mentioned as a contributing factor. Fainting, dizzy spells, epileptic seizures, or other illness, were mentioned as possibly contributory factors in about 10 per cent of the cases in this record.

"Outside of home accidents, the remaining fifth of fatal falls from windows occurred for the most part among professional window cleaners, janitors and porters about buildings. Delirious and insane patients in hospitals and asylums also contributed to the total. Even thieves trying to break in have been victims."

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California Public Relations Survey

Early this year the California Medical Association published the results of a comprehensive "public relations survey." Commenting upon the findings Mr. John R. Little spoke to the Association's House of Delegates in part as follows:

"You simply must get the thought completely out of your mind that Federal medicine can be imposed by anyone, by a pressure group like organized labor, by politicians, or by any administration, Republican or Democratic. Many of you fail to understand that the Government is only a means (and historically the last resort) by which the people get what they want when they cannot get it any other way.

"Please get this straight: The people do not want Federal medicine. They only want what they have been told will result from Federal medicine. The pressure groups and the politicians cannot enact Federal medicine without the clear will of the people. These are not just words. This is the crystal truth, as understood by any 16-year-old political science student. If the people, for example, thought a monarchy would serve them better than a republican form of government, not all the pressure groups and all the politicians could prevent it. What the people want they will ultimately get. The people want everyone to have the benefits of scientific medicine at a cost the lower income groups can afford without financial catastrophe. I suggest you rid your minds completely of any consideration of politicians, pressure groups and administrations; that you think only of what instrumentality you can supply which will satisfy the peoples' wants—an instrumentality which will be superior to anything the politicians can offer. . . .

"Most of the other divergent and extremist viewpoints come from misunderstanding. Judgments and opinions are being formed from incomplete information. It is no wonder such judgments are faulty. Why is the information incomplete? The answer is very simple. The doctors of this state are very busy men and women. If my observation of a few can be applied to the whole, the medical desks in the State of California are piled with staggering heaps of medical journals, Medical Association bulletins and reports—very largely unread. . .

"Regardless of all this, the truth is that the doctors can act in unison. But they will not do so unless they get all the facts. The common danger, when clearly understood, will impel them to united action—just as it does all groups whose leaders heed the warning. . . ."

"Acting in unison is nothing more than team play. True, it takes a kind of spiritual guts on the part of the individual to put aside his interests for the sake of the team's objective. Doctors, however, seem to have a highly-developed spiritual and esthetic quality. Once they learn the joy of team play, as a few of you have, you may expect to see them in the thick of the battle using their highly developed intelligence and tact to disarm the enemy and render him harmless."

The doctors here as elsewhere might profitably be guided by Mr. Little's views. There is no substitute for "team play."

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Committee on Medical Care

Satisfactory progress is being made by the Committee on Medical Care under the Chairmanship of Dr. Frank D. Costenbader. The Committee was reorganized the first of July, two subcommittees being created, the Subcommittee on Prepaid Medicine and the Subcommittee on Diagnostic Clinics. The latter is headed by Dr. Harry F. Dowling. The Subcommittee on Prepaid Medicine does not have a chairman to date, Dr. Costenbader acting as its presiding officer.

The first meeting of the Committee on Medical Care with its Lay Advisory Committee was held on July 6. Those who have accepted appointments to this group are the following: Mr. Frank Bender, Regional Director, Congress of Industrial Organizations; Mr. Frank J. Coleman, Secretary, Washington Central Labor Union; Rabbi Norman Gerstenfeld, Washington Hebrew Congregation; Mr. Frank R. Jelleff; Mr. Howard Kacy, First Vice President, Acacia Mutual Life Insurance Company; Mr. Mark Lansburgh; The Reverend John W. Rustin; Very Reverend Lawrence J. Shehan, D.D., Director, The Catholic Charities; Miss Mary E. Switzer, Assistant to the Administrator, Federal Security Administration; Mr. John Vandegrift, Secretary, Employees' Benefit Committee, the Chesapeake and Potomac Telephone Companies; Mr. Harry S. Wender, President, Federation of Citizens' Associations of the District of Columbia; Mr. Raymond R. Zimmerman, Executive Assistant to the Chairman, Council of Personnel Administration.

The Subcommittee on Prepaid Medicine has developed a subscriber's contract which is being studied by its members and others. If it is accepted by the Committee and approved by the Lay Advisory Committee, attention will be given to organization features of a medical service plan.

Dr. Dowling and the Secretary of the Medical Society visited the Diagnostic Clinic at Johns Hopkins Hospital in Baltimore, August 1. They studied the administrative as well as the professional aspects of the Clinic.

Dr. Costenbader states his Committee expects to present its proposals to the Society in the fall of this year.

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What's in a Label?

In a recent issue of the MEDICAL ANNALS your Observer set forth the views of a military officer on the behavior of "Nervous Nellies" under battle conditions. Another phase of this subject was discussed briefly by Major General David N. W. Grant, The Air Surgeon, before the House of Delegates at Chicago.

". . .I am . . . very much disturbed," General Grant said, "over what to me is a great deal of loose talk over the so-called psychoneurotic. As you probably know, the Army Air Forces have been pioneering in convalescent and rehabilitation work for the past eighteen months and we have eighteen months' experience behind us. Our records show that we are returning to duty approximately 85 per cent of our people, be they war casualties or the so-called psychoneurotic. We are vitally concerned with this so-called flying fatigue, call it what you may—some speak of it as a psychoneurosis in relation to flying.

"Of the combat people returned from the theaters with pronounced operational fatigue, 68 per cent have been put in condition to return to combat duty (I don't think you would call that psychoneurotic) and 85 per cent of all of them are returned to flying duty.

"I don't think we have any right to label these boys psychoneurotic when they are normal individuals, the same as we are, who have been put under tremendous stress, and they need rest and, you might say, medical guidance."

Major General Norman T. Kirk, Surgeon General of the United States Army, who spoke following General Grant, commented on these remarks as follows:

> "I can't agree with General Grant that psychoneurosis isn't a problem in the Army and shouldn't be talked about. I can't state statistics, I am not permitted, but they have been stated as to the number of men that have been discharged from the Navy, from the Army, from the Air Forces, because of psychoneurosis. Over there we saw something that was being done to train medical officers to take care of battle fatigue, whether it was the normal or the psychoneurotic that got that far, and it is a wonderful job, better than we are doing at home. We saw men in there being given barbiturates, put to bed, fed, who were 15 or 20 pounds underweight and were gaining a pound a day under that treatment, and they were reconditioned. In that theater there has been set up a better reconditioning unit than anywhere at home or abroad. A grand job is being done over there."

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, Washington, D. C., and Associate Editor of the MEDICAL ANNALS, also had something to say on this subject recently. He said, "It is very doubtful whether any useful purpose is served by coining new names for these [psychiatric] conditions. We hear much nowadays of combat fatigue, fatigue syndrome, flying stress, operational stress, and so on, just as we heard of shell shock in the last World War. These attempts to establish a new terminology apparently stem from the idea that there is something inherently disgraceful or improper about the development of a psychoneurosis. If the same amount of energy were put into educating the military and the public concerning the true nature of neurosis as is now devoted to the coining of new names, we should probably be making far more progress!"

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Progress of Medical Bureau

In the two and a half years since its establishment, MEDICAL BUREAU has progressed far beyond what was expected. On December 2, 1940, when the BUREAU began operation, it had 114 subscribers, the majority of them to the Alternate Listing Service. On July 1, 1944, there were 295 subscribers, 116 to Telephone Secretarial Service and 179 to Alternate Listing Service.

However, these figures do not tell the whole story. Not only has the volume of completed calls from patients to physicians increased six-fold, 671 to 4,137 a month, but the recorded inquiries received for information about physicians and medical institutions has increased more than twenty-fold, 71 to 1,470 a month. There are, of course, a great number of inquiries of which no record is made.

The personnel employed has of necessity increased, there being seven employees including the supervisor, Mrs. Marian Mannix.

The Society is now negotiating with the Chesapeake and Potomac Telephone Company for the installation of an additional switchboard, there being a greater demand for Secretarial Service than can be provided with present facilities.

The BUREAU, in the opinion of the Medical Bureau Committee, has great potentialities. When the war is over it should be possible for the BUREAU to offer a wider variety of services to physicians and the public.

War Section

LETTERS FROM PHYSICIANS IN THE SERVICES

From Captain M. van Kinsbergen, c/o Postmaster, San Francisco, Cal.:

Dear Ted: Just a few words of good cheer. Things are very quiet hereabouts in amongst the coconuts, coral, palms and soldiers. Just saw the movie "Government Girl," locale Washington, D. C., which made me homesick no end. Hero and heroine go skidding around what appeared to be Dupont Circle on a motorbike. That wasn't far from my old stamping ground.

In five days I will have achieved the distinction of having been overseas 30 months. I personally believe that that is long enough but after all, war is hell and I'm only a very small part of the show. I suppose it'll sound trite to you, it having been oft-repeated, but this long separation from all I hold dear has served to make me love all those little things all the more, or at least, to appreciate them.

Here's hoping that you and yours are enjoying the same perfect health that I am. How I'd like to have a good old-fashioned cold! These boys have been very healthy all this time. Best regards to everybody.

From Lt. Colonel John F. Dominick, Station Hospital, Fort Worth, Texas:

Dear "Ted": Here in Forth Worth, in one of the nicest parts of the great state of Texas, we meet doctors from all parts of the United States and I have found invariably that all are excellent, well trained men whose only fault is that some have difficulty in being Medical Officers as well as doctors. However, they all are eager to learn and it is surprising how quickly they adapt themselves to the military life. I'm sorry to hear that some of the older physicians are passing away, and hope that we will be back before long to take up our share of the load they are carrying.

Your list of addresses of various fellow members is indeed a handy one and I am making good use of it. I am glad to hear that the Medical Bureau has been so successful and I look forward to subscribing when I return.

The chart of practicing physicians you mentioned gave me a comprehensive picture on the situation which is becoming more acute in other parts of the country.

We are well provided for at this post in a medical way and the work is very interesting. Of course, the main purpose of the Medical Officer, particularly the Flight Surgeon, is that of prevention of disease and flying accidents. The endless routine of physical exams and routine immunization of personnel is one of our chores, but we get a goodly percentage of genuinely interesting medical cases.

From Lt. Commander Daniel F. Lynch, San Diego, Cal.:

Dear Ted: There are five of us at the Naval Hospital now from Washington: Howard Kane, Jim Davidson, Max Lapham, Hazen Shea and myself. All are well and doing fine.

Keep up the good work, Ted, and give my regards to the members of the Society and also to Rotary.

There's not much to tell about our work. We are busy—some times more than others—but in general one day is like another. A regular flow of patients from all parts of the Pacific. For instance, today Colonel Carlson of Carlson's Raiders was operated on for an arm injury received only a few weeks (maybe only ten days) ago at Saipan. Distances mean nothing today. Under such conditions the work is exciting and interesting.

From Major William A. Ryon, Fort Lewis, Washington:

Dear Mr. Wiprud: As you see, after two years of effort to get overseas, I still find myself restricted to the zone of interior. Former years of military training have seemed to doom me to the job of training medical soldiers. My first year in the service was spent at Camp Pickett, Virginia, where I did nothing but train and turn out G.I.'s. It was quite a change becoming company commander overnight, after practicing medicine for fifteen years in Washington. Adjustment to such a life with the tremendous physical demands that went with it, was far from easy. However, I can look back with a great deal of pride to the achievements of many of the men I personally trained in the campaigns of North Africa, Sicily, Italy and Attu.

I have enjoyed one brief interlude of medical practice in the service and it was an invaluable one. At the close of the training center at Camp Pickett, I was assigned to the 263rd Station Hospital, just leaving Camp Lee, for desert training in the West. I served for ten months with this unit as the Chief of Medical Service, having many fine experiences in medicine during combat maneuvers on the California-Arizona desert.

During the months of January and February, I was fortunate enough to be assigned to Walter Reed for the course in tropical and military medicine. This was the finest course of its kind in the world and I felt quite proud of my diploma at its completion.

I rejoined my hospital unit in California, following graduation at Walter Reed, to find it all packed up to move overseas. After waiting two months for the promised orders, we were suddenly taken off the "alert" and ordered to Fort Lewis, Washington.

(*Continued on page 362*)

On The Home Front

The Ninth Annual Assembly of the United States Chapter of the International College of Surgeons will be held at the Benjamin Franklin Hotel, Philadelphia, October 3–5, 1944. Eminent surgeons in Government, military and civilian practice will appear on the program, which will be devoted to war, rehabilitation and civilian surgery.

The Second Wartime Public Health Conference and the 73rd Annual Business Meeting of the American Public Health Association will convene in New York City, October 2–5, 1944, with headquarters at the Hotel Pennsylvania. The scientific program will be concerned with wartime emergency matters as they affect public health.

The Third War Conference and the 46th Annual Convention of the American Hospital Association will take place October 2–6, 1944, in Cleveland, Ohio. Plans for extending hospital care to all sections of the country will be considered. Statler Hotel will be convention headquarters.

Dr. Cloyd H. Marvin, President of **George Washington University,** has announced the promotion of 26 faculty members. Included in the list are the following members of the Society from the School of Medicine:

William S. Anderson, from Associate in Pediatrics to Assistant Clinical Professor of Pediatrics; Jeter C. Bradley, from Clinical Instructor to Associate in Otorhinolaryngology; Frank D. Costenbader, from Associate to Assistant Clinical Professor of Ophthalmology; Aubrey D. Fischer, from Clinical Instructor to Associate in Otorhinolaryngology; Mabel H. Grosvenor, from Associate to Assistant Clinical Professor of Pediatrics; Preston A. McLendon, from Clinical Professor to Professor of Pediatrics; William Ross Morris, from Clinical Instructor to Associate in Surgery; Gilbert Ottenberg, from Clinical Instructor to Associate in Urology; Howard P. Parker, from Clinical Instructor to Associate in Obstetrics and Gynecology; John A. Washington, from Associate to Assistant Clinical Professor of Pediatrics; and Richard W. Wilkinson, from Clinical Instructor to Associate in Ophthalmology.

Dr. John L. Parks became Executive Officer of the Department of Obstetrics and Gynecology, September 1.

CALENDAR OF MEETINGS

August 9	Subcommittee on Social Affairs, Annual Scientific Assembly
August 11	Subcommittee on Venereal Diseases
August 15	Joint Meeting, Executive Board and Committee on Public Policy
August 25	Committee on Public Relations
August 28	Executive Board
August 29	Subcommittee on Attendance, A. S. A.
August 30	Subcommittee on Diagnostic Clinics

Dr. F. X. McGovern was appointed the Society's representative on the **District of Columbia Committee on Services to Veterans and War Workers** by the Executive Board on July 24. This Committee was created recently by the District Commissioners to make a complete survey of the facilities, both public and private, that now exist or shall hereafter be set up to provide services to service men and war workers; to act as a coördinating group and make such recommendations as will prevent duplicating and overlapping of effort; to decide upon the necessity for a central city-wide information center to act as clearing house for all persons who need information on the available facilities, such a center to be under the administrative supervision of this Committee; and to decide upon the necessity for further facilities on a central city-wide basis to supplement existing services.

Fifty-nine public and private organizations were invited to designate representatives to serve on this Committee.

In view of the number of cases of poliomyelitis at **Children's Hospital,** the medical staff appointed a special committee on poliomyelitis to determine what action or precautions should be taken to check the course of the disease. Members of the Committee are Dr. P. A. McLendon, *Chairman*; Drs. Richard H. Todd, William S. Anderson, Frank M. Hand and Joseph S. Wall, *ex officio*. On August 29, the Hospital reported 91 patients with poliomyelitis admitted since July 1, of which number 5 had died, 16 had been discharged and 70 were still in the Hospital.

The Executive Board on June 26 voted to appoint a **special committee to revise the Constitution and By-laws of the Society.** The committee consists of Dr. Roger M. Choisser, *Chairman*; Drs. Coursen B. Conklin, A. Magruder MacDonald, Henry C. Macatee and A. B. Bennett.

A Family Advisory Service of the District of Columbia unit of the American Women's Voluntary Services is being organized, with the intention of providing courses of instruction to assist the disabled veteran in making a better home and community adjustment. Serving with members of AWVS on an advisory board are Dr. Custis Lee Hall, Dr. Winfred Overholser and Major Walter F. Barton, M.C., U.S.A., Office of the Surgeon General.

Brigadier General Warren F. Draper, former Assistant Surgeon General of the United States Public Health Service, has been promoted to the rank of Major General. General Draper is serving as Chief of the Army Medical Corps' Public Health Branch of Civil Affairs in the European theatre. He is well known to many members of the Medical Society, having addressed the Society on several occasions.

Major William H. Carey, Director of District Sanitation, **Dr. George C. Ruhland,** District Health Officer, **Dr. Rex Buxton,** Director of the Washington Institute of Mental Hygiene, **and Dr. A. Barklie Coulter,** Director of the District Bureau for Tuberculosis, participated in a Washington Daily News-WRC round table discussion on postwar planning in the field of public health, August 3.

METROPOLITAN POLICE BAND

Dr. William M. Ballinger has been appointed to the Citizen's Committee, representing the Medical Society, which is raising funds for the Metropolitan Police Band.

Dr. Ballinger urges every member of the Society to contribute to the Band. He points out that the Band is strictly a non-profit organization, playing without charge at public gatherings. Captain Charles Benter, U.S.N., retired, for thirty years leader of the United States Navy Band, is Director.

The money which is sought is needed to buy and repair instruments and for building up a music library.

Contributions of $5.00 or more will be welcomed. Checks should be sent to John A. Reilly, Treasurer of the Citizens' Committee, Second National Bank, 1333 G Street, N.W.

Dr. Custis Lee Hall was appointed to represent the Society on the Washington Council of the Handicapped by the Executive Board, July 24.

Dr. Henry B. Gwynn is presently on duty in the Reconditioning Division of the Office of the Surgeon General of the Army.

E. F. Kelly, Phar. D., has resigned as Secretary of the American Pharmaceutical Association, after having held this office since 1926.

Dr. Frederic A. Besley, Secretary of the American College of Surgeons and for many years Professor of Surgery at Northwestern University School of Medicine, died August 16, at the age of 76 years, at Waukegan, Illinois, his native city. A charter member of the American College of Surgeons, Dr. Besley served the organization as Treasurer for one year, as President and Regent in 1937, and as Secretary from 1938 until his death.

MEETINGS

Thursday, Friday, Saturday, October 5, 6 and 7

16th Annual Scientific Assembly

See program elsewhere in this issue

Wednesday, October 25

Symposium on Poliomyelitis

1. "Epidemiology." Kenneth F. Maxcy, M.D., Professor of Epidemiology, Johns Hopkins University
2. "Basic Considerations in the Treatment of Poliomyelitis." John A. Toomey, M. D., Department of Contagious Diseases, Cleveland

Other speakers to be announced later.

BOOK REVIEWS

Neurosurgery and Thoracic Surgery, prepared and edited by the Subcommittees on Neurosurgery and Thoracic Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. Howard C. Naffziger, Chairman, Subcommittee on Neurosurgery; Evarts A. Graham, Chairman, Subcommittee on Thoracic Surgery. Military Surgical Manuals VI. Pp. 310, with 100 illustrations. Price, $2.50. Philadelphia: Saunders, 1943.

The manual is divided into sections on Neurosurgery and Thoracic Surgery. The section on Neurosurgery is made up of five chapters written by authorities in their respective fields. The chapter on gunshot and other injuries of the scalp, skull and brain is based largely upon experience from the last war, and the treatment is essentially that which was used by Dr. Harvey Cushing. The operative procedure for each type of injury is outlined. Attention is called to the fact that sulfanilamide may be used locally on the brain but that sulfathiazole should never be placed in contact with the brain because it produces convulsive attacks. The authors bring to our attention a principle which has long been neglected when they state that the general plan of treatment for the patient who is unconscious after an injury to the head, whether open or closed, is the same. Should there be evidence of obstruction of the airways by the accumulation of mucus, the patient had best be transported in the prone or semiprone position. The most important principles of nursing are to maintain a free airway.

The treatment of gunshot and other injuries of the spinal cord begins with transportation, and this impresses the reviewers as being just as important as the surgical treatment. The indications for operation and the postoperative care are outlined. There is a nice discussion of the value of skeletal traction in the treatment of fractures of the cervical spine.

Injuries of intervertebral discs are probably the most common neurosurgical condition encountered in our troops prior to the time they enter combat. Such injuries are particularly likely to occur in parachute troops, dive-bomber pilots, tank troops and others whose backs are put under heavy strain. The clinical picture is presented and the operative technic is clearly demonstrated in accompanying illustrations.

Since injuries of peripheral nerves are not very common in the practice of most surgeons during peacetime, a reference book on this subject is essential. The symptoms produced by injury to the principal peripheral nerves and the tests needed to arrive at the diagnosis are described. Illustrations have been gathered from various sources to illustrate the anatomy and surgical technic.

The chapter on infections of the nervous system is brief and to the point and gives both the surgical and drug therapy.

The chief criticism one might direct at the manual is that most of the articles are based upon experience in the war of 1914–1918; however, this may also be an advantage in that the principles have been tested by time. This book is recommended not only for everyone in the armed forces who may have to look after injuries to the nervous system but also those responsible for instructing medical soldiers and medical students.

J. W. W. & J. J. K.

Thoracic Surgery: Thoracic injuries constitute a large percentage of modern war and civilian casualties. The immediate mortality from thoracic wounds is high, approximately 33 per cent of the dead on battlefields, 25 to 30 per cent of the deaths in dressing stations, and 20 to 25 per cent of the deaths in ambulances, while the mortality rate in hospitals "depends on whether the speed of evacuation and the distance of transportation permit an appreciable number of the serious wounded to live long enough to reach the hospital."

In order to reduce this high mortality those caring for these casualties should be thoroughly trained in the care of thoracic wounds and their complications, due regard being given certain special aspects that set thoracic wounds apart from wounds of the head, abdomen or extremities.

This manual of thoracic surgery presents, very excellently, in a brief, yet sufficiently detailed manner, the fundamental knowledge which those caring for thoracic injuries should have. It is divided into four parts: Chapter I deals with the adaptation of general surgical principles to the special problems of thoracic surgery; chapter II deals with treatment and disposition by the personnel of advanced surgical stations; chapter III gives in more detail the diagnosis, first aid, and definitive treatment of thoracic injuries and their complications; chapter IV gives a description of the technical procedures mentioned in the preceding chapters, and this is especially well done. There are several very good illustrations which render the text more readily understandable.

The book serves well the purpose for which it is intended—"a reference manual for medical officers in the field, caring for wounded men under the exigencies of enemy action." Its study will, however, be valuable for anyone having to do with the care of thoracic injuries.

W. R. M.

Principles and Practices of Inhalational Therapy. Alvan L. Barach, M. D., Associate Professor of Clinical Medicine, Columbia College of Physicians and Surgeons; Assistant Attending Physician, Presbyterian Hospital. Price, $4.00. Pp. 215, with 59 illustrations. Philadelphia: Lippincott, 1944.

Dr. Barach has been an outstanding worker in the field of inhalational therapy for more than twenty years. Among other important contributions, he introduced helium as a therapeutic agent in 1934. The reviewer believes this book can be recommended without reservation to all physicians, and particularly to internists and anesthetists. The material is authoritatively and attractively presented, and the volume provides the first inclusive and yet concise text concerning treatment by the use of oxygen, oxygen-helium, and carbon dioxide. Most of Dr. Barach's original reports which first appeared in various medical journals are summarized in this book.

There are excellent discussions of the pathologic physiology of the various states in which there is local or general anoxia. Of general interest are the chapters concerning oxygen in the treatment of congestive heart failure, pneumonia, coronary thrombosis, massive collapse, and bronchial asthma, and of particular interest to those who are concerned with air travel and conditions related to the war are the chapters on altitude sickness, aero-embolism, transportation of patients by air, and submarine medicine. Every physician who may encounter pulmonary edema would do well to read the chapter on the treatment of this distressing condition, particularly concerning the use of oxygen under positive pressure, which has been shown by Barach and others to be at times life-saving. There are excellent chapters on the various methods of administering inhalational therapy, and on the care of the equipment.

B. J. W.

Annual Reprint of the Reports of the Council on Pharmacy and Chemistry of the American Medical Association for 1943. Price, $1.00. Pp. 150. Chicago: American Medical Association, 1944.

The present volume of reprints contains only eight reports on rejected articles; it is interesting to note that objections to these are on a much higher plane than those it was necessary to urge against the flagrantly quackish preparations of earlier days.

Perhaps the most noteworthy of the nineteen general and "status" reports in this volume is the one declaring the Council's intention of using henceforth only the metric or centimeter-gram-second system in its publications. The report itself gives some interesting and readable history on the subject of weights and measures. Of most timely interest to the general physician as well as the endocrine specialist is the report on nomenclature of endocrine preparations. The report gives a currently quite complete list of the available commercial preparations, including those not accepted by the Council as well as those which stand accepted. Another report in the field of endocrinology is that recognizing the use of estrogens in the treatment of prostatic carcinoma.

Attention should be called to at least two of the reports concerned with vitamin preparations, namely, the status report giving the Council's decision that the evidence does not yet warrant the acceptance of cod liver oil preparations for external use, and the report announcing the Council's recognition of the use of massive doses of vitamin D in arthritis, and in this volume includes a current comment from the *Journal* titled, "Hope (false) for the Victims of Arthritis," which reemphasizes this objection.

The status report on xanthine compounds gives a much needed delimitation of the therapeutic claims that may be recognized for aminophylline and its related xanthine derivatives. Of similar interest is the report on the local use of sulfonamides in dermatology, and in the same category may be mentioned the report on agents for the treatment of Trichomonas Vaginitis, which points out that the present aim should not be for new medicaments in this field but for further information, especially concerning failures with those that have been used. In another status report the Council sets forth its conclusion that present evidence does not justify claims for advantage of oral use of sodium sulfonamides over the free drug.

In line with its decision to consider for acceptance various contraceptive preparations, the Council published a status report on conception control, which is concluded in this volume. The report comprises a series of concise statements on the various preparations and methods of control, prepared by Dr. Robert Latou Dickinson, together with a statement of criteria by which the Council will consider the acceptability of contraceptive jellies, creams, and syringe applicators and nozzles, diaphragms and caps.

It cannot be too often said that this volume, as well as the other publications of the Council, remains of paramount interest to all who are concerned with rational use of therapeutic agents.

New and Nonofficial Remedies, 1944, containing descriptions of the articles which stand accepted by the Council on Pharmacy and Chemistry of the American Medical Association on January 1, 1944. Price, $1.50. Pp. 778. Chicago: American Medical Association, 1944.

The current volume of New and Nonofficial Remedies reflects two important and forward-looking decisions of the Council, namely, to use the metric system exclusively in all its publications, and to consider for acceptance contraceptive preparations offered for use as prescribed by physicians. These decisions in turn reflect the vigorous and progressive leadership of the Council in the service of medicine.

The chapter on contraceptives is quite comprehensive; with the acceptance of more preparations, it will undoubtedly assume a large place in New and Nonofficial Remedies. The Council has thus far accepted some contraceptive jellies and creams, contraceptive diaphragms, diaphragm inserts, syringe applicators, and fitting rings. It is understood that a number of additional preparations have been submitted for Council consideration since the book went to press. This chapter represents a courageous and long-needed innovation.

Some of the new preparations that appear in this volume are: Succinylsulfathiazole, a new sulfonamide, a proprietary brand being "Sulfasuxidine"; Diodrast Concentrated Solution, a preparation of the already accepted Diodrast, for use in a special diagnostic procedure for visualization of the circulatory system and also cholangiography; a preparation of Sodium Benzoate for use as a liver function test; Mersalyl and Theophylline, accepted under the name Salyrgan-Theophylline Tablets, proposed as an adjunct to intravenous injection of the already accepted drug; Zinc Insulin Crystals and Zinc Insulin Injection Crystalline; Tetanus Toxoid; and Concentrated Oleovitamin A and D, a dosage of the pharmacopoeial preparation.

A glance at the preface shows that certain general articles have been revised to bring them up to date. More or less important revisions have been made of the following chapters: Barbituric Acid Derivatives, Estrogenic Substances; Parathyroid; Ovaries; Sulfonamide Compounds; Vitamins, especially the sections, Vitamin B complex and Vitamin D. In this connection it is worth noting that each chapter in the book is reviewed annually, or more often if indicated, by the responsible referee for such revision.

This volume is of paramount interest to all those concerned with rational and modern drug therapy.

ISAAC JUDAH SILVERMAN, M.B., CH.B., F.A.C.P.

(1888–1944)

Dr. Isaac J. Silverman, well known psychiatrist, died at Georgetown Hospital, August 6, 1944, following a brief illness. He resided at 341 Seventeenth Place, N. E.

Dr. Silverman was born in Calcutta, India, May 3, 1888. He received his early academic training at Hawthorn College in Australia and his degree in medicine from the University of Melbourne in 1911. He had practiced medicine in Australia, New Zealand, Ontario (Canada), and at the State Hospital in St. Joseph, Missouri.

Dr. Silverman was appointed to the staff of Gallinger Municipal Hospital in 1929. He served as Instructor in Psychiatry at George Washington University School of Medicine from 1929 to 1933, when he became a member of the teaching staff of Georgetown University School of Medicine. At the time of his death he was Professor of Clinical Psychiatry at Georgetown and Assistant Chief Psychiatrist at Gallinger.

He was the author of "Physical Function of the Cerebellum" and a frequent contributor to medical journals. His most recent contribution to the *Medical Annals of the District of Columbia* was published in the March 1944 issue, giving results of the treatment of acute alcoholic psychoses by hypertonic saline.

Dr. Silverman became an Associate Member of the Medical Society of the District of Columbia in 1932 and was elected to Active Membership in 1933. He was a Fellow of the American Medical Association and the American College of Physicians, and a member of the American Psychiatric Association.

He is survived by his wife, Mrs. Ada Thompson Silverman, and a stepson, Lt. Jack Thompson Woodyard, stationed at San Marcus Air Field, San Marcus, Texas.

WILLIAM ADAM MESS, M.D.
(1883–1944)

Dr. William A. Mess, an Active Member of the Medical Society of the District of Columbia, was killed in an automobile accident while traveling on the Mount Vernon Memorial highway south of Alexandria, Va., August 11, 1944. His office and residence were located at 1418 M Street, N.W.

Dr. Mess was born March 21, 1883, in Brookville, Indiana. He was a graduate of Gonzaga College, the National College of Pharmacy, and the George Washington University School of Medicine, receiving his degree in medicine in 1907. He was licensed in the District the same year and continued in general practice until his death.

He was a Fellow of the American Medical Association. He became affiliated with the Medical Association of the District of Columbia in 1909 and continued his membership in the District Medical Society after the two organizations were amalgamated. He was also a member of the Washington Board of Trade, Knights of Columbus and the Loyal Order of the Moose.

Surviving are his wife, Mrs. Matie C. Mess; three sisters, Mrs. William Moreland, Washington, Sister Mary Adamar, Lancaster Pa., and Mrs. Neil Clark, Petersburg, Va.; and four brothers, Lt. Robert W. Mess, serving in the U. S. Army, Dr. Henry F. Mess, Silver Spring, Md., Dr. Carl J. Mess, Bethesda, Md., and George B. Mess, Forest Glen, Md.

(*Continued from page 332*)

Mrs. J. was discharged on the seventeenth day and Mr. J. on the twenty-fifth day after the first operation and on the thirteenth day after the resection.

I believe the explanation for the phenomena described in these two cases is as follows: Strong physics entered the cecum and became pocketed between the ileocecal valve and the carcinomatous stricture causing the gut to distend, the blood supply to be scanty, the intestinal contents to be irritating, and gangrene to result.

(*Continued from page 356*)

We arrived here with five other station hospitals and the six were promptly de-activated. All of the personnel of these units were used to form cadre for a new training center. Once more I find myself back in the training business, this time as a commander of a medical training battalion. Naturally, I am deeply disappointed in not continuing with my medical activities and in once more missing my opportunity of going overseas. However, if the Army thinks I can best serve it in a training capacity, I will do my best to turn in as good a job as possible. My big desire is to see this war ended as quickly as possible, get back to my little family and the practice of medicine.

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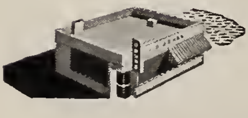

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MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *October, 1944* NUMBER 10

A STUDY OF TWO HUNDRED CASES OF INFERTILITY

HERMAN HERTZBERG, M.D.
Washington

NATURALLY in my role as a gynecologist I am concerned chiefly with the female partner in a childless marriage. However, certain phases of the problem relating to the male partner must also be considered, at least indirectly, inasmuch as the major portion of the treatment of the latter is referred to the genitourinary specialist, psychiatrist or internist. Despite that fact, it has been my custom in the past to check up occasionally upon the progress of a male partner who is under the care of such specialists. I prefer to convince myself by a microscopic study of the semen from time to time that such progress is actually being achieved. On the whole I must confess that, to judge from what I have thus learned in my own cases of male sterility, the ultimate results of treatment are quite discouraging. Cases of azoöspermia are hopeless, while those with deficient semen offer an approximately equal chance of success or failure.

In my estimation there is no greater satisfaction and gratification in a favorable termination of any case in any branch of medicine than the delivery of a baby to a previously childless couple.

A gravid patient who has conceived in spite of all contrary plans and desires is a nuisance from beginning to end, and a physician is better off without such practice. In contrast a case of infertility generally involves a patient who carries out orders cheerfully and is willing to cope with all the sacrifices which she is called upon to make.

During an examination of my records I discovered that about 5 per cent of my practice has consisted of this type of patient. Before proceeding with any case of infertility I follow a regular schedule. First, I must be thoroughly convinced that both the patient and her husband are extremely anxious to have a child and, second, that the desire for offspring is not a sudden whim or fancy. Third, both the wife and the husband must agree to carry out all instructions and undergo any major or minor procedure before abandoning treatment. Fourth, they have to consent that I am the party to decide the time to terminate treatment, when the sterility is unquestionably absolute. Fifth, they are impressed with the fact that it may take years before a successful result is obtained.

I am convinced that the subject of fees should never be discussed and payments for individual visits never considered in the management of infertility. It will seem to the patient that paying money month after month without seeing any immediate results is a wasteful expenditure, and she will then very likely consult another physician who, in her estimation, may be more successful. In reality the total outlay of money may be very nominal. Therefore, it has been my custom to continue treatment until a definite conclusion is reached, without sending bills or making any particular charges. I found that by following this method the patient will continue her treatments.

It would take too long to describe a detailed method of procedure in a given case of sterility, but a few remarks as to the procedure I follow will not be out of place. I insist upon meeting the husband and examining at least one or two specimens of semen, secured either by coitus interruptus or by masturbation. On numerous occasions I have had patients who had been treated by other physicians for years, and the examination of the husband's semen had been omitted entirely. It was taken for granted that the husbands were all right. At any rate they claimed that they were. The women were curetted, insufflated, laparotomized, given innumerable injections, and otherwise tortured for years. When I examined the semen of the husbands of these patients I found them to be perfect blanks to their and my surprise.

Before proceeding with the study of a case the following facts are determined: 1. That at least 12 months of normal cohabitation have elapsed without the use of any contraceptives. 2. Frequency of copulation. Some couples will get together about once a week or once in two weeks and miss the time of ovulation altogether. 3. The modus operandi. This is important since some couples are entirely ignorant of the physiology of the sex act. To illustrate this point I wish to cite the following case: A pharmacist, 36 years of age, 6 feet tall, and a picture of good health, had been married 14 years to a woman 35 years old and of equal physical perfection. No contraceptives had been used. Upon examination of the wife I found an intact hymen. It seems incredible that an intelligent couple of this type practiced coitus intercruralis for 14 years. 4. Whether any form of douche was used immediately after intercourse. A great many women are under the impression that intercourse is an unesthetic function and that therefore they must douche at once.

The physiognomy of the patient must not prejudice the gynecologist as to the prognosis of the case. A truly feminine type of woman may have congenital anatomic sexual organ defects or vice versa. On April 17, 1941, Mrs. B. E., aged 26 years, came to me for treatment of sterility. My first impression was that she was a male masquerading in female attire. Apparently she sensed my thoughts and pleaded to be accepted as a patient, as three other doctors had turned her down. She was 5 feet, 2 inches in height, weighed 173 pounds, and had very coarse features, with a luxuriant beard, a moustache (shaved, of course), and general hirsutism. She had been married 5 years and had used no contraceptives. Somewhat reluctantly I proceeded with the case, and to my great satisfaction she conceived in December 1942, 20 months after her first visit to my office. On August 17, 1943 I delivered her of a perfect male child. The cause of her sterility was a surgical problem and not endocrinologic, as it had seemed to be from her virile appearance.

When the above facts are found satisfactory the female partner is studied from different angles: physiologically, anatomically, by means of laboratory procedures, and with the aid of whatever other measures are indicated. No surgery or even tubal insufflation is resorted to until the male partner is found to be potent.

How long is treatment continued? As long as 5, 6 or 7 years. If a serious complication develops during treatment, should the case be abandoned? The following case will answer this question: Mrs. A. S., aged 34 years, married at

23. At 24 she had a stillbirth after 5 days of labor due to a generally contracted pelvis and disproportion. She was unable to conceive again for 10 years, when she came to me on January 31, 1940. There was a second degree prolapse of the uterus, a large cystocele, a large rectocele and practically no perineum. The cervix was eroded and infected. I corrected the pathology in a two-stage operation. The patient conceived in November 1940. On February 17, 1941 she was taken to Sibley Hospital, where she aborted fetus and secundines. Recovery was uneventful until March 6, when she had to be readmitted for symptoms suggesting ovarian cyst with twisted pedicle. Upon laparotomy I found an abdominal pregnancy with a fetus of about 2½ months, free in the abdominal cavity, and a placenta adherent to the omentum, loops of intestine, and pelvic organs. There was free oozing everywhere. Ligation was impossible. All placental tissue was left in the peritoneal cavity. After a very stormy recovery the patient left the hospital on the fifteenth day. The prognosis for a future pregnancy was certainly nil. However, 6 months later the patient missed her menstrual period, and on May 3, 1942 I performed a cesarean section upon her and delivered a normal male child. To my utter amazement the peritoneal cavity was perfectly normal and without any sign of her former abdominal pregnancy or adhesions.

This paper is based upon a study of the records of 200 of my private cases of infertility. The etiology as finally determined was traced to the female only in 149 cases, to the male in 42 cases, and to both partners in 9 cases. In the 42 male sterility cases there were 3 cases of impotence, 10 cases of azoöspermia, 25 cases of oligospermia, and 4 cases of constitutional deficiencies. In the 3 cases of impotence, 2 resulted in divorces, since the male partners would not allow their wives to be artificially inseminated, while 1 patient is still struggling with a psychiatrist. In the 10 cases of azoöspermia, 2 couples adopted children, and in 8 cases the wives were artificially inseminated. Among the 25 cases of oligospermia which were referred to urologists there were 8 successes, and 17 patients are still under treatment. In the 4 cases of male sterility associated with constitutional deficiencies which were referred to internists, 2 terminated successfully and 2 have failed thus far.

Of the 8 cases which were artificially inseminated by heterologous donors, 4 cases terminated successfully; case 1 after 4 inseminations, case 2 after 8 inseminations, case 3 after 18 inseminations, and case 4 after 12 inseminations. In the 4 failures to date, case 1 has been inseminated 7 times, case 2, 9 times, case 3, 12 times, and case 4, 16 times. In 3 cases artificial insemination had to be resorted to by homologous donors, that is, with the husband's semen, for the following reasons: one patient had a megalovagina and the cervix could be reached only with difficulty on account of large vaginal folds, which caused the formation of a contaminated pool of accumulated vaginal discharge which killed the sperms before they reached the cervical canal. Three inseminations terminated successfully. Another patient had marked retroversion of the uterus with the cervix lying closely behind the symphysis pubis. She required 4 inseminations before success resulted. The third patient had a very deep and narrow vagina and required 6 inseminations.

In the 149 cases with the etiology in the female only there were 111 cases of primary sterility, that is, women who had never conceived before, and 38 cases of secondary sterility, that is, women who had had 1 or more pregnancies previously. Of the latter, 17 had had puerperal complications, including induced abortions; 6 admitted having had gonococcic infections; and 13 had cervical lesions, uterine prolapse, marked retroversions and retroflexions, or pronounced perineal lacerations. Two had a large fibroid uterus.

Successes in the 111 primary cases of sterility have been attained so far in 47 cases. In the 38 cases of secondary sterility thus far 11 have terminated successfully. Thirty-three cases are still under treatment. Owing to the shifting population of this City, 49 patients moved, and the majority of these were referred to other gynecologists elsewhere for continuation of treatment. Several birth notices have been received by me from happy mothers in this group.

Of all the 200 cases only 9 were discharged by me as hopeless. This represents 4.5 per cent of the total of 200 cases.

The treatment in the successful cases was nonsurgical in 43 and surgical in 15. Of the latter, laparotomies were resorted to in 8 instances and plastic operations in 7 instances.

There were 16 cases of complete tubal occlusion, by which I mean that the pressure in tubal insufflation is carried unsuccessfully up to 250 mm. Hg. There were 37 cases of partial occlusion (assuming that in a patent tube the insufflated air or gas will enter the peritoneal cavity below a level of 120 mm. Hg).

There were 9 cases of vaginismus, dyspareunia, and other anatomic defects, 9 cases were of anovulatory menstrual type, 6 cases of pelvic neoplasms, 2 cases with a stenotic cervix following deep cauterizations, and 9 cases of endocervicitis with erosions and lacerations. In 11 cases there was a history of gonococcic infection. Ten cases were attributable to various other causes.

Of the 9 anovulatory cases 5 terminated successfully. Case 1 was that of a woman, married 5 years, who was treated with Gonadogen. Case 2 was that of a woman who had been married 9 years, who was treated with Gonadogen and Anteron. The third patient, married 10 years, was treated with Gonadogen, Anteron and Synapoidin. The fourth patient had been married 8 years and was treated with Gonadogen, Anteron and Synapoidin. The fifth patient had been married 9 years and was treated with Gonadogen, Anteron and Synapoidin. Four patients are still under treatment.

There were 9 cases in which both partners were at fault. Of these 7 were primary and 2 secondary. Successes were obtained in 2 primary cases and 1 secondary case; 1 couple is still under treatment and 5 have dropped out or moved. It is obvious that these patients are not as persistent as those in whom the etiology of the sterility is unilateral. They realize the difficulties and become more easily discouraged.

The ages in the 200 female partners ranged from 18 to 41 years. The average age was 27. The length of time of infertility varied from 1 to 20 years, with the average about 5 years. Cases which have terminated successfully thus far were treated for from less than 1 year to 7½ years. The average case required 2¼ years (or 27 months).

Successes based on percentages are as follows: total number of patients, 200; successes so far, 75, yielding 37.5 per cent.

Conclusions

1. The infertile couple must show extreme desire for offspring and be willing to coöperate as long as necessary to attain results.
2. Individual fees should not be considered in the treatment of infertility to achieve success.
3. The prognosis as a whole is very good in this type of practice, provided the doctor as well as the patient are persistent and patient in the course of removal of the etiology and appropriate treatment.

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Penicillin successfully used for infection of eye socket. The successful treatment with penicillin of a case of orbital cellulitis, a dangerous disease which may lead to blindness and even loss of life, is reported by H. O. Sloane, M.D., Philadelphia, in *The Journal of the American Medical Association* for September 16, 1944.

The case reported was that of a boy of 12 whose left eye was involved, the infection originating in one of the sinuses. Sulfadiazine was tried without affecting the condition in any way and operation was contemplated both for the sinus condition and locally to establish drainage and relieve the inflammation and swelling of the tissues in the socket of the left eye. However, Dr. Sloane says, under the continued use of penicillin administered by injection into a vein for a period of ten days the condition cleared up completely, so that it was unnecessary to operate.

THE INTERPRETATION OF DREAMS: SCIENCE OR FICTION?

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THE general practitioner of medicine today often wonders how the psychotherapist is able to uncover the "root conflict" or unconscious motivations behind psychosomatic illness. When he learns, for example, that dream-analysis is an indispensable technic in curing the neurotic, he is still in the dark as to how dream interpretation brings this about. My purpose, therefore, is to help the physician gain a better understanding and appreciation of the scientific value of dreams in the psychotherapeutic management of his neurotic patients.

Historic Aspects

Dreams have always fascinated mankind. In fact, the art of deciphering dreams goes back to early antiquity. Evidence of man's attempt to evaluate his dreams can be found in ancient civilizations. Dreams were considered a bridge of communication between man and the supernatural. Primitive cultures regarded them as the language of demons and evil powers. Soothsayers believed that dreams could foretell one's future. This prophetic power attributed to dreams inspired charlatans to exploit man's natural curiosity to know what the future holds for him. Clairvoyants later branched off into palmistry, tea leaf and sand readings, crystal-gazing and astrologic predictions. A remote remnant of this early dream-prophecy can be found in some of our popular dream books written by laymen.

It was not uncommon for people to believe that through dreams they were able to contact their divinity or communicate with the dead. Today we often hear that a person became a minister because he received "the call," an inspiration from the supernatural world. Similarly, dreamers felt that they possessed unusual powers to "receive messages in their sleep" from the other world. As time went on dreams were thought of as representing a struggle in man between two opposing forces, good and evil. This was not too far fetched, for psychoanalysts discovered that in dreams of neurotic patients we find a duality in conflict between desires and repressions.[1–16] In Freudian terminology we would say a struggle takes place between the instinctual cravings of the Unconscious, the Id, and the moral censorship of the Super-ego.

The Nature and Function of the Dream

Dreams tell us much about the quality of the patient's emotions. They are essentially emotional in nature. It is some unsatisfied emotion that prompts the individual to dream about the situation. The particular emotion persists through the dream and it is this emotion that keeps the memory of the dream lasting a long time. Therefore, in a sense, regardless of how different the "scenery" of various dreams may be, they may have a lot in common because of a common emotional cause.

Just as every physical symptom in the sick individual serves a particular function for the organism, so if we assume that the dream is not a haphazard phenomenon but is part of the orderly functioning of the mind, it, too, must have a function. It would be difficult to believe that they are entirely meaningless and senseless. There is little doubt that the dream reflects, albeit in a grossly exaggerated form, the unfulfilled wishes and aspirations of the individual.

It therefore has more than one function to perform or, to put it in another way, it can express its function in a great many different ways.

The first function is that of wishfulfillment. The most frequent emotional experience in the dream is a fervent wish for something to happen, successes to be attained, or a goal to be reached. Quite often the emotion of the dream is that of anxiety, and it is interesting to note how frequent anxiety in dreams is followed by a large number of psychosomatic reactions such as palpitation of the heart, rising of the blood pressure, tremors, sweating, etc. Another frequent emotion in dreams is anger, which, too, may be accentuated by psychosomatic reactions.

To illustrate: John Smith is a very average, even mediocre, individual. He neither has the ability to achieve a higher position, nor does he have the energy to make the most of his capacities. He lives in a small community, a city of about 10,000, and looks with envy at the mayor of the city, inwardly anguished by the thought that he could never be mayor. How he would love it! He would give everything to be mayor, but his common sense tells him that there is no chance for him because he realizes that he hasn't the ability nor anything else that it takes to get such a position. But at night, when the slumber curtain falls, bitter reality disappears, and sleep removes the difficulties as if by a magic wand. Poor John Smith dreams that he was elected mayor of the city by an overwhelming majority. So great was his victory, so he dreams, that he receives congratulations from many nearby and even far away. He further dreams that so great was his success as a mayor, so productive and useful was his management, that when next election came there was not even a doubt in anybody's mind that John Smith was going to be the next mayor. Nobody wished to be his opponent because they knew that they would be defeated.

This dream did not last very long, just a fleeting second, but it had a remarkable effect on John Smith. Next day he felt in good spirits. Even if merely in a dream, still he was mayor, and that was good to know. We see here that the dream performs a function of satisfying a much longed-for and unfulfilled wish. Every one of us has wishfulfillment dreams. They make us feel good and in one respect they make life worth living, for what is important to us are not the hard realities of life but emotional satisfactions. And this is often derived more from imagination and dreams than from actual accomplishments.

The second function of the dream is the release of inhibitions. There are many things that we want that we cannot get because society has failed to give its approval.

For example, William Jones is a married man, the father of several children, and a most respected member of his community. You would not suppose nor even imagine from his outward behavior that there was anything wrong with him; and, in point of fact, there is nothing wrong with him but he is not happy in his home life. The romance that led him to marry has long since worn off. The sweetheart that he knew long ago has by now become a very prosaic wife. She does not cater to him as she used to, yet his heart still craves romance; and he would like nothing better in this world than to have some woman make some fuss over him, telling him what a wonderful man he is, etc. But he is very prim, very austere, and very strict. He does not even dare to cast covetous glances on women, for that is wrong. But at night, when the censorship of consciousness is gone, all inhibition is removed, and his mind is free to wander in any direction. He dreams himself in situations where not one woman but many are falling in love with him. He is lionized and adored as few men have ever been. For instance, he dreams how in a night club chorus girls flock to his table telling him how handsome he is and how envious they are of other women who adore him. They sit on his lap and smother him with kisses. And this pleases him a great deal because of the fact that his wife is so cold in actual marital relations. Because of this his sex relations with his wife are very infrequent. But in the dream one woman after another makes love to him, following which he does not feel the least bit exhausted. And what if he does have a nightly emission? It is a little embarrassing, to be sure, but it is so much fun having it.

What is true of this man may also be true of his wife, who may be dreaming of a parallel situation. Life is funny!

A third function of dreams is to release accumulated unhealthy emotions, which society does not allow us to do during the day.

For instance, George Brown was roundly bawled out today by his boss, but poor Brown, though he felt very bitter about it, could not say a word to the boss, for that might mean the loss of his job. Yet his feelings must find an outlet some way; so at night he dreams that his boss was killed in an accident or that for some reason or another the boss was demoted and he, George Brown, was given the boss's place.

Hostility is a very powerful emotion of which society does not approve, but nobody can stop you from hating in a dream.

A fourth function or mechanism is symbolization. It must be pointed out that these dreams are not entirely unbridled, that our conscience in some obscure way exercises a control, which we speak of as censorship; and when the wishfulfillment is too crude and too obvious, the censorship disguises it in such a way that we are not even able to recognize it as such. We speak of this as symbolization. The function of the symbol is to keep us from being shocked too much. For instance, in the previous illustration just given of George Brown, what he really wanted to do was to kill the boss; but his conscience would not permit him to be a murderer, not even in a dream, and therefore he arranges to allow that to happen as if by accident.

An example of symbolization might be a dream of an unmarried girl who develops a number of psychosomatic symptoms as a result of having to repress her sexual cravings. She is at conflict with herself as to whether or not she should give herself sexually to a man prior to marriage. To dream of having sex relations with the opposite sex is too much for her conscience (Super-ego) to overcome. And so her dream becomes highly disguised through this process of symbolism. She may dream that she is chased by a bull. In the dream she falls to the ground and is gored by one of the horns. The bull is considered a powerful animal, a symbol of a virile man. She finds herself struggling with the bull manifested by violent tossing in bed. Falling to the ground symbolizes an excuse or rationalization for yielding and being gored represents being raped.

Thus we see how symbols serve to camouflage the sexual content of the dream.

A fifth function or mechanism of the dream is regression. If life is not as pleasant as it might be, the dream provides us with a wonderful opportunity to re-live that part of our life which is most pleasant to us. And is there in the life of any individual a part of life that was more pleasant than childhood? Then we did not have so many troubles and worries. We received affection from our parents, relatives, etc.; so it is not surprising when things do not move so smoothly during the day that at night we dream ourselves into early childhood. Let it not be supposed, however, that regression is characteristic only of neurotics. It is doubtful whether there is a single human being who does not have occasional dreams of regression.

A sixth mechanistic function is bipolarity. We learn that human beings are not always nor necessarily consistent in their feelings. Strange as it may seem, persons may entertain at the very same time and with reference to the same situation two opposite feelings: love and hate, success and failure, etc. Perhaps a good illustration is that of a woman who gave birth to an illegitimate child. Her maternal instinct prompts her to love the child and accept it as part of herself. The social situation, however, demands that she reject the child. Thus we have here a woman in whom acceptance and rejection vie with each other for supremacy, now one being on the top, now the other. This reaction is spoken of as "bipolarity" or "ambivalence." And in people who cannot make up their minds in a particular situation it often leads to feelings of indecision.

For example, a young girl may confess her love for two suitors and may be undecided as to whom to marry following a proposal from both. She submits a number of dreams in which one of them is hurt or killed in an accident.

Thus we see that at the unconscious level she prefers one suitor to the other. Her dream-life serves to solve this conflict of indecision. The psychotherapist is able to eliminate the suitor toward whom the death wishes are directed, or toward whom she manifests the greater amount of bipolarity.

A seventh function is repression. It has already been mentioned that human beings in the particular social setting in which they live are not always able to satisfy all their cravings. Two avenues are left to them: either to satisfy these cravings regardless of social prohibitions and thus become involved in criminal acts, or else repress these cravings and remain good citizens at the expense of unsatisfied desires. This is what the majority of people do, but desires are often very strange in their behavior so that they cannot be done away with entirely. Proscribed during the day, they emerge during the night in dreams in which they find a complete outlet. Yet, odd as it may seem, after the dream has satisfied all the desires completely, the conscience of the man does not feel quite at ease; he is conscience-stricken even though he has had only a dream. Hence the frequent anxiety with which the individual wakes up from such a dream.

For example, a husband may have found it necessary to repress his anger directed against his wife in the waking state, but in dream life he dreams that his wife died after a severe attack of pneumonia. He awakens feeling panicky and nervous as a consequence of the guilt feelings implied in the dream.

In the dream we sometimes find a repression of guilt. The tendency of the individual not to incur the disfavor of the society in which he lives is so great as to prevent him even in dream-life from being caught at committing some asocial act. Accordingly, in the enactment of the dream, instead of himself committing the crime he has somebody else commit it while he appears more as a witness and an onlooker to the whole thing. In this way the crime is committed, the wish is satisfied, but the dreamer cannot be held guilty.

From the above it can be seen that if one has made a careful study of quite a large number of dreams and has learned how release of inhibitions, repression, regression, bipolarity and other mechanisms work in dreams as well as the role that emotions play in the dream, one may arrive at definite laws and relations that are found in dreams. Hence, instead of dreams being mere caprice and expressions of superstitions and prejudice, they may be of very scientific value when studied in a systematic way. The correctness of the dream is sometimes verified by other dreams, because it is often found that the same trend remains in many dreams. Interpretation becomes much more plausible in this light. The most common tendency in psychoanalysis now is not to interpret single dreams but many dreams at one time.

Illustrative Dreams

Case L. E. Anxiety neurosis. Psychic symptoms: self-consciousness; pavor nocturnus; fear and anxiety. Psychosomatic symptoms: gastrointestinal upsets; palpitation; anorexia and insomnia.

Dream 1. Fear (anxiety with wishfulfillment). "A storm was coming up. Rain poured and lightning flashed and thunder rolled. I was quite frightened and ran into the arms of a man. I cried, and he soothed me."

The storm is a symbol of her emotional conflicts. Fear serves as the excuse or rationalization for seeking heterosexual affection. The dream further represents her "crying" need for father-protection corroborated by evidence in her anamnesis of a strong father-attachment.

Dream 2. Marriage (wishfulfillment). "I dreamed of getting married. It was a mad dash. The ceremony was performed. After that I do not know what happened."

The patient fears she will be an old maid because of her obesity. It is not uncommon for unmarried girls who possess strong feelings of inferiority to submit dreams of getting married or becoming pregnant. In dreams the unconscious desires and conflicts of the patient come to the surface. It is these same repressed desires and unresolved conflicts that find expression in the form of psychosomatic symptoms.

Dream 3. "I am a baby again" (regression to childhood). "I was dreaming that I was home. A friend whom I knew since I was 8 years old was with me. We were sucking lollipops."

To appreciate the sexual connotation of the dream one would have to acquaint himself with other dreams in which her sexual fantasies (coitus and fellatio) become transparent.

Dream 4. Fear of Sex (symbolization of the snake and the male sex organ). "I was in a kitchen with a man. I have no idea who he was. He was playing with two small snakes. They were both about 6 inches long, marked like rattlers. Finally he tied them together as if they were pieces of twine. The snakes, of course, were wiggling and squirming. The man after playing with them for awhile forced my hand and made me hold them in my hand. Of course I jerked away and dropped the snakes. In the dream, at this time, I screamed but did not awaken. The next thing that the man did was to take the little snakes, knotted together, and place them between two slices of bread and make a sandwich of them. He tried to make me eat it. At this point I fought back and screamed."

The above dream brought forth an association with an actual sexual experience that acted as a "psychic trauma." She stated that one evening a man offered to "give her a lift" in his car while she waited for a bus. Instead of driving her to her destination, he parked the car on a lonely road and began making sexual advances to her. She refused sexual intercourse but compromised by fondling his penis, which he insisted that she do before he would consent to drive her home. We say, therefore, that this dream is an echo dream of an actual experience, the residuals of which appeared in disguised symbolism, the snake being representative of the man's phallus, described in the dream as being approximately 6 inches in length. Since practically all of her nightmares involve snakes, I am inclined to diagnose her "pavor nocturnus" as a dramatic expression of her "fear of sex," which in the waking state is revealed in her anxiety neurosis.

Behind many physical symptoms lurk similar psychogenetic factors. It is for this reason that the "neurotic" goes from physician to physician hoping to find the "medicine" that will cure.

Case G. J. Conversion Hysteria. Psychic symptoms: fear of outdoors (agoraphobia); panic reactions. Psychosomatic symptoms: numbness in the lower extremities; headaches; muscular weakness and vomiting.

Dream 1. Anesthesia Vaginalis (release of inhibitions). "I seemed to have an erect penis besides my own sex parts. I tried placing it in my own vagina."

The patient represses her desires for self-gratification, attempting to release her sexual inhibitions through dreams. The dream also suggests bisexuality, which was substantiated by case history material. She admits she had always wanted to be a boy.

Dream 2. Guilt (regression, bipolarity and release of unhealthy emotions). "I was in bed with Rose. She began to masturbate me. The bedroom was a large room at home where I sleep so as to avoid being on the same floor with my family. My sister came into the room, then went out again without appearing to notice us. Rose said in a very taunting way, 'I can't help it if you're frigid.' I slapped her in the face very hard several times."

We note that in the dream it is the other girl that takes the initiative or aggressive role (displacement of guilt). The bedroom is the one she used at home (regression to home life). Her reason for not sleeping on the same floor with her family was due to the traumatic experience of having once witnessed her parents engaged in sex relations. Her sex guilt accounts for the bipolarity toward her girl friend whom she slaps. Frigid women are often sadistic and project their sexual frustration on to others. The dream also serves as an outlet for pent-up homosexual tendencies.

Dream 3. The Electra Complex (guilt resulting in panic reaction following a father-daughter dream). "Father and I were riding in our car toward some near destination, and I wondered about some place which was farther away. It seemed that we were driving because there had been a new law prohibiting the use of telephones any more, and that worried me, because I felt that I would often have a vital need to telephone someone. Dad speeded up the car and went quickly through three green lights before they turned red and started up a long hill which seemed to be out in the country. I said, 'Daddy, let's not go all the way,' but he kept going; and I realized that I had not been emphatic enough. I pleaded with him and said, 'Oh please, won't you go back,' but he only laughed at me, and I felt as though he were trying to torture me. He didn't look at me at all, just laughed, and his face looked cruel. I got panicky, knowing that he wouldn't stop; so I opened the door and stepped out on the running board, hoping that would convince him, but he didn't stop until sometime later; and then I seemed to be reading statistics about somebody from a kind of home for mental cases."

Riding in the car with father denotes "motion," a coital symbol (dreams of flying, climbing, falling, struggling are called motion dreams). The need to telephone someone is evidence of an inner desire to "communicate" with someone. This someone is her own "conscience." The red and green lights convey a sense of right and wrong. The expression, "Daddy, let's not go all the way," has a sexual connotation. The father makes light of the whole affair, which naturally throws the patient into a panic. Threatening to jump from the running board reveals a preference for suicide to a father-daughter affair. Reading about a home for mental cases brought forth in her dream-association the statement that she must be out of her mind to entertain such thoughts about her father.

Summary and Conclusions

1. (a) "The dream is the via regia or royal road to the patient's unconscious" (Freud).

(b) Everyone dreams; no one sleeps who does not breathe; neither does one sleep who does not dream. They are concomitant. There are those who recall their dreams and others who forget them. With training and instruction the patient makes a specific effort to capture the dream before it vanishes.

2. The dream is the mirror of the neurotic mind. It reflects the emotional conflicts of the patient.

3. Dreams serve to gratify the instinctual cravings of the neurotic which he represses in the waking state. They are rich in symbolism and hence are meaningless to him.

4. Dreams, as we have learned, possess definite motifs such as wishfulfillment, release of inhibitions, release of accumulated unhealthy emotions, regression, repression, etc.

5. The dream also serves to inform the psychotherapist as to the progress the patient is making, his attitude toward the treatment, and exposes any suicidal or homicidal preoccupations which the patient may be entertaining during his analysis. As Missriegler expressed it, "The dream is the barometer of the analytical situation."

6. Physical conditions, such as hunger, pain, indigestion, headaches, etc., can influence the nature of the dream.

7. Modern psychotherapeutic experience has taught us that dream interpretation does not necessarily have to center around the vita-sexualis of the patient. Dreams give us important clues regarding other phases of the patient's life.

8. Psychotherapy becomes effective once the psychopathology of the neurosis is revealed to the patient. Dream analysis aids us in exposing the unconscious motivations behind the symptoms. The ultimate cure comes through the utilization in psychoanalysis of (a) emotional release (mental catharsis), (b) insight (bringing that which is repressed in the unconscious to a level of conscious understanding), and (c) discipline (ability of the patient to apply the knowledge he has gained through psychoanalysis).

9. Dreams, as we have tried to show, possess a definite scientific value. Dream interpretation has been one of the most valuable contributions to psychotherapy, both as a diagnostic and a therapeutic agent in the better comprehension of the patient's psychosomatic ailments.

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THE ENCEPHALITIC FORM OF BENIGN LYMPHOCYTIC CHORIOMENINGITIS

Report of a Case

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BECAUSE of the apparent unfamiliarity of the medical profession with the meningoencephalitic form of benign lymphocytic choriomeningitis and the relative newness of the disease in clinical practice it is deemed advisable to report the following case.

REPORT OF CASE

The patient, a native Hawaiian who had resided for the previous 7 years in Washington, D. C., had been in excellent health until 2 weeks before entry to Georgetown University Hospital on December 25, 1941. He had contracted an illness described as "grippe" which was characterized by symptoms of a mild upper respiratory infection, a severe frontal headache, malaise and apparently slight fever. He had been seen by a physician on the second day of his illness and "grippe capsules" had been prescribed. After 4 days of bed rest and simple medication he felt better and attempted to resume his work, but found that even slight exertion was very fatiguing, and on several occasions he had attacks of what were apparently simple syncope while attempting to walk. He apparently had had a continued slight fever and anorexia, and muscular weakness had been marked. Several days before entering there was return of the frontal headache, and the patient had again consulted his physician who had advised hospitalization. At the time of entry the headache had ceased and the only complaint was that of weakness and of lightheadedness on standing or walking. There was no history of contact with patients with infectious disease. His work as secretary to a congressman had confined him to the city for many months.

The past history was essentially negative except for the usual childhood diseases. There was no history of malaria or other tropical disease nor of venereal contact. The family history was entirely negative. Systemic review revealed no disorder except as specified in the present illness.

On admission the temperature was 101°F., the pulse rate 70 per minute, and the respiratory rate 18 per minute. The patient was a tall, rather thin young man, pleasant, coöperative, and intelligent but showing a considerable degree of lassitude. The head and neck were essentially negative except for evidences of a mild nasopharyngitis. The ocular fundi were normal, as were the pupils and extraocular muscles. There was no tenderness over the sinuses or mastoids. There was no evidence of nuchal rigidity. Examination of the chest was negative. The heart was normal in size, shape and position; there were no murmurs, but a relative bradycardia of 70 per minute was present. The blood pressure in both arms was 120/80 but fell to 90/60 when the patient sat up in bed. The abdomen was soft and somewhat tympanitic. There was slight tenderness over the splenic area, and the tip of the spleen was palpable on deep inspiration. Peristalsis was normal. The genitalia, rectum and prostate were normal. A complete neurologic examination showed no deviation from normal.

Laboratory studies on admission showed the hemoglobin to be 93 per cent, with 4,830,000 red blood cells and 5,300 white blood cells per cu. mm. of blood, of which 8 per cent were band forms, 75 per cent segmented cells, 12 per cent lymphocytes, and 4 per cent monocytes. The urine was entirely normal. At this time no definite diagnosis was made, but it was felt that typhoid fever, malaria, miliary tuberculosis and "central pneumonitis" should be considered first. The patient was placed on symptomatic therapy and under isolation precautions.

Further laboratory studies revealed the blood Wassermann and Kahn tests to be negative; there were no malarial parasites demonstrable in stained smears; agglutination tests for typhoid, paratyphoid A and B and brucellosis were negative. Stool and blood cultures were later reported as negative. A roentgenogram of the chest on December 27, 1942 was reported as follows:

"There is very slight clouding of the right cardiophrenic angle but not more than is frequently seen normally. This might represent a beginning pneumonia. The remainder of the lung fields is clear." On the evening of December 27, 1941 there was a marked change in the patient's condition. The temperature had risen to 104°F., the pulse rate was 80, and there was marked lassitude and mental hebetude. At this time there was a slight degree of nuchal rigidity. A lumbar puncture at this time showed a spinal fluid pressure of 150 mm. of water, with a clear colorless fluid. A stat cell count on the fluid was mistakenly reported as showing 7 cells per cu. mm. These findings were considered at the time to be due to meningismus.

In view of the uncertainty of diagnosis and equivocable X-ray findings sulfadiazine therapy was begun. On the following day reëxamination of the spinal fluid showed a cell count of 70 cells per cu. mm., of which 80 per cent were lymphocytes and 20 per cent polymorphonuclear cells. The spinal fluid Wassermann was negative in all dilutions. In view of these findings the diagnoses of tuberculous meningitis, anterior poliomyelitis and encephalitis were considered.

On December 29, 1941 the temperature had fallen to 100°F. and continued to range for 5 days between 100° and 101°F., the pulse rate remaining consistently low. Clinically the patient had no new complaints during this period, but lassitude had progressed to somnolence and the patient could be roused only a few minutes to say he felt well before again falling asleep. He denied headache or discomfort of any sort and appeared well orientated in all spheres. During this period there was only transient slight nuchal rigidity, and an inconstant, questionably positive Kernig's sign. There were no fundal changes and no evidence of involvement of the cranial nerves, but on several occasions the abdominal reflexes were absent. The spleen continued to be definitely palpable.

During the febrile period, which lasted until January 3, 1942, spinal fluid examinations were reported as follows: On December 30, 1941 the pressure was normal; the total protein was 15.4 mg. per 100 c.c., the sugar 54 mg., and the chlorides 635 mg. per c.c. The cell count showed 91 cells with 90 per cent lymphocytes. On January 2, 1942 the total protein was 18.5 mg., the sugar 52 mg., and the chlorides 704.5 mg. per 100 c.c. The cell count had risen to 100 with 90 per cent lymphocytes and 10 per cent polymorphonuclear cells.

On January 3, 1942, in the fourth week of the illness, the temperature dropped to normal and remained essentially so. At this time also the patient suddenly aroused from his somnolence but was completely disorientated as to time, place and persons; he showed complete amnesia for the events of the past 7 years, but was able to remember vaguely his employer when confronted by him. When the situation was explained to him he appeared able to understand it, but was unable to remember anyone who left his room for more than 5 minutes. His reactions to his surroundings were apparently normal when explanation was made, but he constantly questioned concerning his circumstances. His diction was excellent and there was an apparent euphoria; he had no systemic complaints other than weakness, and ate and slept well as a rule. For the remainder of his illness physical and neurologic examinations were essentially negative; the spleen was no longer palpable. Sulfadiazine therapy had been discontinued after the temperature had become normal and was believed to have had no effect on the course of the disease. Frequently repeated routine blood and urine examinations had shown no significant deviation from normal; the early relative leukopenia had been transient. The spinal fluid, however, continued to show signs of infection, although the erythrocyte sedimentation rate was normal. The spinal fluid sugar averaged 54 mg. per 100 c.c. and the chlorides 675 mg. per 100 c.c., and the cell count varied between 100 and 30 cells per cu. mm., with a gradual drop to lower numbers; the cell differential continued to average 90 per cent lymphocytes and 10 per cent polymorphonuclear cells. In view of the fact that the picture presented did not correspond to any of the usual types of encephalitis, and had apparently been part of a systemic disease, it was considered necessary to rule out a space-occupying lesion, either a neoplasm or an abscess.

A roentgenogram of the skull showed no significant changes; there was no apparent source of abscess, and lack of evidence of increased pressure made the possibility of neoplasm, either primary or metastatic, seem remote. It was not deemed advisable to utilize air contrast studies.

On January 20, 1942, a specimen of spinal fluid was sent to Dr. Charles Armstrong of the National Institute of Health for inoculation studies.

In the meanwhile the patient continued to gain in strength and vigor but showed little if any change in his mental status. At the request of his parents, who had come on from Honolulu, he was discharged to a private hospital in California, leaving Washington on February 9, 1942 in the care of a competent male nurse. Subsequent reports from California have indicated that the parents had decided to keep him at home, since shortly after his arrival he showed a decided improvement in his mental state. A recent report indicates that he is again well and at work and suffers from only occasional lapses of memory.

Six weeks after submission of the spinal fluid to Dr. Armstrong, ferret inoculations revealed the presence of the virus of lymphocytic choriomeningitis.

DISCUSSION

On entry to the hospital the patient presented a symptom-complex requiring the differential diagnosis of fever of unknown etiology, with tuberculosis, typhoid fever, brucellosis, subacute bacterial endocarditis, infectious mononucleosis, and malaria among the possibilities. These entities were fairly well eliminated by laboratory studies and by the course of the disease. With the development of evidence of central nervous system and meningeal involvement we were presented with the problem of an infection producing a predominantly lymphocytic reaction in the spinal fluid. The most common of these, namely tuberculous meningitis and acute syphilitic meningitis, were rather readily eliminated, the first by failure of development of a drop in the spinal fluid values for chloride and sugar as well as absence of headache and signs of basilar involvement, the latter by negative history and negative blood and spinal fluid serologic examinations. Infectious mononucleosis with meningeal involvement was considered but was ruled out because of failure of development of the typical blood picture and a negative heterophile antibody reaction. Foci of infection near the meninges and cerebral injury were fairly well ruled out by the absence of concomitant signs. Elimination of the above pointed to a virus infection of the central nervous system. Of these mumps and herpes zoster could be eliminated by absence of accompanying parotitis, orchitis, pancreatitis and herpetic vesicles. Poliomyelitis was considered but was eliminated by the long prodromal stage and the absence of evidence of anterior horn cell involvement. The St. Louis type of encephalitis seemed improbable also because of the long prodromal stage but could not be eliminated otherwise. The Economo type of encephalitis also remained a distinct possibility. Benign lymphocytic choriomeningitis was considered, but at that time the paucity of meningeal signs, the relatively slight pleocytosis, and the predominantly encephalitic picture were considered to be against this diagnosis by myself and the neurologic consultants. The information was received with considerable surprise that animal inoculations of the spinal fluid had revealed the presence of the virus of lymphocytic choriomeningitis.

Lymphocytic choriomeningitis is an interesting and apparently increasingly common disease. The isolation of the virus of choriomeningitis by Armstrong and Lillie in 1934 opened the way for the discovery of a distinct clinical and epidemiologic entity in that group of central nervous system diseases which had been described in 1925 by Wallgren as "acute aseptic meningitis." The reservoir for the virus as a rule has been found to be the common house mouse, and there is ample evidence of practically world-wide distribution. The modality of human infection with the virus is believed to be in the main contamination of food with the excreta of these animals.

Clinically the disease, in common with most central nervous system infections, presents many interesting variations, and it is the opinion of Armstrong that too few definitely proven cases have as yet been reported to fully define the limits of its symptomatology. Several fairly well defined clinical types of the disease, however, have been described.

A. *The Grippal Form:* The discovery of specific antibodies in the blood of 11 per cent of a group of 2,000 normal individuals selected at random from various parts of the United States, who with few exceptions had nothing in their history to suggest any type of central nervous system involvement, suggested the presence of a type of the disease without demonstrable central nervous system involvement. As demonstrated by Kreis in a series of experimentally produced human infections the disease has an incubation period of 1 to 2 days and is characterized by the "influenzal" train of symptoms, with chilliness, malaise, muscular aches and pains, prostration, lumbar backache, leukopenia, and fever of 101° to 103° F. The fever tends to occur in 2 or 3 waves, and the febrile period lasts from 7 to 20 days. Symptoms of upper respiratory infection frequently accompany this picture. Mild headache and lightheadedness are common. The frequency with which this common train of symptoms is caused by the choriomeningitis virus is of course unknown, but it is significant that serologic studies by Farmer and Janeway on a series of 106 individuals with a history of recent upper respiratory infection designated as "grippe," "influenza" or a "cold" without evidence of meningeal irritation showed moderate or strong protective antibodies against the virus in 28 per cent as contrasted to 11 per cent in a series of individuals selected at random by Armstrong and his associates.

B. *The Meningitic Form:* This form is usually preceded by a prodromal group of "grippal" symptoms of 2 or 3 weeks' duration, often with a remission immediately before the onset of meningeal symptoms. It is characterized by fever of 101° to 104°F., headache, chilliness, nausea and vomiting. Drowsiness, disorientation, and memory defects are occasionally noted. The pulse is usually slow in proportion to the fever. Nuchal rigidity is always present though usually of short duration. Mild papilledema may occur. Kernig's and Brudzinski's signs are sometimes present. Transient reflex changes may occur. In this form the blood picture is usually normal, and the virus may be recovered from the blood only during the early phases of the disease. Strangely enough, the erythrocyte sedimentation rate is usually normal. The spinal fluid is under normal or slightly increased pressure and shows a pleocytosis of 60 to 3,000 cells, of which 95 to 100 per cent are lymphocytes, although cases in which only 80 per cent of the cells were lymphocytes have been reported. The sugar and chloride values are usually normal, as is the colloidal gold curve. The protein content is slightly elevated. The virus can be isolated as a rule only during the first 7 to 10 days of the disease. The duration of this picture varies from 7 to 30 days; and recovery is usually complete, but some cases of persistent headache presumably due to arachnoiditis have been noted.

C. *The Meningo-encephalitic or Encephalomyelitic Form:* In this form, in addition to the meningeal symptoms above described, somnolence, disturbance of the deep reflexes, paralysis or anesthesias may occur. Personality changes, and disorientation may be found. Psychosis, apparently of organic basis, has been reported in a few cases. The spinal fluid findings approximate those found in the meningitic form, but recovery is usually prolonged and may be incomplete.

D. *The Asymptomatic Form:* The discovery of antibodies in the blood of a rather large series of normals has led to the postulation of the existence of an asymptomatic form. However, the universality of "upper respiratory infections" and the possibility that some of these are unidentified forms of the disease make it doubtful that such an entity exists.

Isolation of the virus from the blood or spinal fluid by animal inoculation is the only certain diagnostic criterion. Complement-fixing antibodies to the specific antigen develop in the blood 3 to 4 weeks after the onset of the disease. Protecting antibodies distinct from the complement-fixing bodies develop in 6 to 8 weeks and are demonstrated by mouse protection studies. The demonstration of specific antibodies or protecting antibodies as in most viral diseases of course is not proof of the etiology of any specific attack, but the demonstration of a rising titre is strong presumptive evidence. Demonstration of the absence of these antibodies during the first few weeks of this illness corroborates the specificity of subsequently developing antibodies.

Clinical differential diagnosis of the common meningeal form in most cases offers few difficulties, but in the meningoencephalitic or encephalomyelitic form it frequently must rest on the above laboratory studies.

The case reported was unusual in several

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CONGENITAL HEMI-EDEMA
Report of a Case

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ALTHOUGH chronic lymphedema is relatively rare, it is important from a cosmetic point of view and its partially crippling nature. Since we have reason to believe that the hemiedema of the patient whose case we are about to report was one of lymphedema, it would be well to review this subject briefly. E. V. Allen[1] in a review of 300 cases of lymphedema observed at the Mayo Clinic in a period of 10 years classified the cases as follows:

A. Noninflammatory	
I. Primary	
Praecox	93
Congenital	
(1) Simple	12
(2) Familial (Milroy's disease)	0
II. Secondary	
Malignant occlusion	32
Surgical removal of lymph nodes	61
Pressure	1
Roentgen and radium therapy	3
B. Inflammatory	
1. Primary (single or recurrent acute and chronic)	41
2. Secondary (single or recurrent acute and chronic)	
Venous stasis	13
Trichophytosis	5
Systemic diseases*	5
Local tissue injury or inflammation	34

"Lymphedema praecox," which affected the largest number, occurs mainly in females, begins between the ages of 10 and 24 years, involves one or both lower extremities, gradually but sometimes rapidly extends up the leg or legs, and is occasionally complicated by acute lymphangitis and cellulitis. The skin eventually becomes roughened and the edema resistant to pressure, and actual hypertrophy of tissue results. The limb feels heavy, but there is no pain. Allen hypothecated that the additional load thrown on the lymph vessels by rapidly developing reproductive structures might induce a functional incompetence of the lymph vessels or allow entrance of infection into the lymph trunks and nodes in the pelvis. However, he said it was possible that the explanation might be a congenital underdevelopment of lymph vessels, or their inability to develop quickly enough to supply adequately tissues that are growing rapidly.

In congenital lymphedema the lymphedematous swelling, usually of one lower extremity, is present at birth, and the skin may remain soft and the edema resistant to pressure, or there may be actual hypertrophy of the limb, true elephantiasis. In the familial type (Milroy's disease[2]), first described in 1892, several persons in the same family have lymphedematous swellings of one or more extremities. Congenital lymphedema is produced largely by lymphangiectasis, a developmental anomaly. Variations of the familial form have been reported, such as in the cases of Meige,[3] in which the edema made its appearance at puberty. This form is similar to lymphedema praecox but with a familial predilection.

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* There were no cases of filariasis.

Secondary noninflammatory lymphedema does not concern us here. The cause is usually obvious, although the fundamental basis of the edema may not be explained adequately; for example, after removal of lymph nodes in human patients the occurrence of edema is difficult to understand, since the same procedure in animals apparently is not followed by the appearance of edema. Low-grade cellulitis and lymphangitis may be responsible.

Inflammatory lymphedema, exclusive of the chronic form, is featured by single or recurrent attacks of acute cellulitis and lymphangitis, ushered in by a chill, accompanied by fever, manifested locally by redness and edema with tenderness and swelling of the proximal lymph nodes, and in recurrent cases terminating in elephantiasis. In the rare chronic form the skin is persistently warm and reddish. In any case lymphangitis produces occlusion of lymph vessels by thrombosis or by the proliferation of connective tissue. The streptococcus is usually responsible for acute attacks. In the primary form the lymphangitis and cellulitis are not secondary to any known local abnormality, whereas in the secondary form the cause is obvious, such as venous stasis, trichophytosis, systemic disease (including filariasis), and such diverse conditions as contusions, burns, lacerations, surgical incisions, vesicles, abscesses, furuncles, fractures, penetrating wounds, dog-bites, tularemic abscesses, pelvic inflammatory diseases and appendicitis. The acute attacks may occur weeks or months after the original episode, which may not have been associated with any marked clinical evidence of infection.

We have not been able to find a report of a case similar to ours in medical literature. Because of the delimitation of the edema to one side of the body it is probable that we are describing a new form of edema.

REPORT OF CASE

The patient, I. F., is a 21-year-old unmarried white woman, whose only complaint is that the limbs of the right side are larger than those of the left. This condition has existed as long as she can remember and was noticed first by her mother when she was 2 weeks old. It has not inconvenienced her physically, but as she has grown into womanhood she has become distressed because of her abnormal appearance. There has been no significant restriction in the use of the enlarged arm

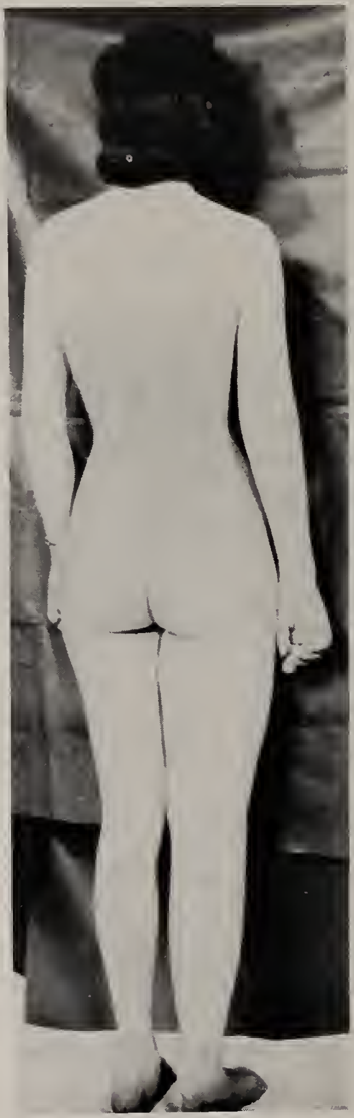

FIG. 1. The enlargement of the right upper and lower extremities is obvious

and leg. Apparently the swelling of the extremities has not progressed, but standing and walking increase the swelling of the lower extremity temporarily; the upper extremity does not increase in size correspondingly, but during the day the hand does become more edematous.

The birth was normal. There is a history of bronchitis at the age of 5 years, but other illnesses are not recalled. The general health is excellent, and there are no functional disturbances. The mother and father are living and well, and 2 sisters, older than the patient, are apparently normal. There is no knowledge of a similar disorder among relatives.

When the patient was examined first she was found to be a normal young woman except for pitting edema of the whole right upper extremity, the right lower extremity up to the groin, and the right side of the vulva (fig. 1). There was no definite pitting edema of the right side of the head, neck or trunk, but the soft tissues of the right side of these parts of the body were thicker than those of the left, as noted by picking up the tissues with the fingers. The patient was 66 inches (165 cm.) tall and weighed 120 pounds (55 Kg.). The skin was of normal color and texture throughout, and sweating was equal in all extremities. Arterial pulsations, reflexes, and muscular power were normal on both sides. The swelling was of the easily pitting variety, and the subcutaneous tissue was not indurated. The right upper extremity was 1 to 5.2 cm. greater in circumference than the left at various levels, with the greatest difference just above the elbows.* The edema involved the apex of the axilla. The right lower extremity was 11 cm. larger at midthigh, 4 cm. just below the knee, 2.5 cm. at the calf, and less than 1 cm. about the foot. There was little measurable difference in circumference of the fingers and toes of the two sides. The measurements varied moderately on various occasions, with the time of day, amount of exercise, season of year, and amount of rest. There was no evidence of actual hypertrophy of the affected limbs. The temperature of the skin at various levels was the same on both sides. A striking feature was the great enlargement of the right side of the vulva, the right labium minus resembling a pedunculated cauliflower (fig. 2). This obviously caused the patient great concern and she requested its removal. This was done, with prompt healing of the wound. Histologic sections revealed a loose network of connective tissue with large spaces which were interpreted as being dilated lymphatic capillaries. Arterial blood pressures were normal and equal in the arms and legs. Venous pressure measurements were normal and equal in the arms, and there was normal response in the pressure with exercise (opening and closing the fist rapidly for 1 minute). Urinalysis, blood counts, serologic tests for syphilis, and roentgenograms of the chest and bones of the arms, hands and pelvis were normal or negative.

The wearing of an ace bandage snugly applied to the right lower extremity from the toes to the upper third of the thigh throughout the day resulted in moderate relief of the swelling, but the greatest reduction of edema has been affected in both arm and leg by the administration of 6 grams of ammonium nitrate daily and semi-weekly intragluteal injections of 1 c.c. of mercupurin. The latter has resulted regularly in the loss of 3 to 5 pounds within 24 hours but rapid return of weight within 3 days. This treatment, although only moderately effective, has given the patient great mental comfort since her affliction is not nearly so noticeable.

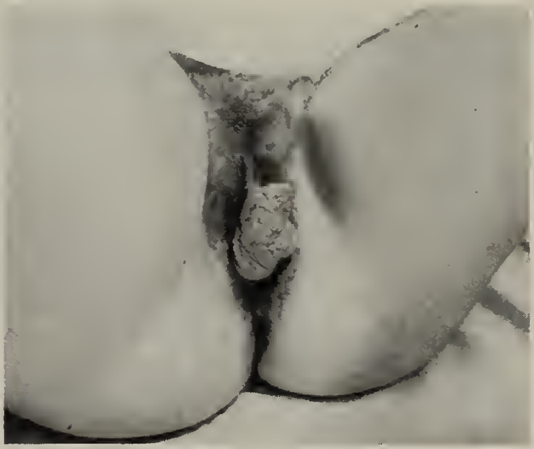

FIG. 2. Elephantiasis of the right labium minus

DISCUSSION

It is most probable that the edema of this patient is a lymphedema. The absence of changes in the quality of the skin and subcutaneous tissue does not alter this impression, since coarseness and induration are very slow to develop in many cases of noninflammatory lymphedema. Certainly there is no evidence of past or present inflammation of the lymphatics or of the associated lymph nodes. Obstruction of the deep veins has been eliminated as a possibility by the normal venous pressure in the arm and the normal response to exercise. The histologic appearance of the excised labium

(Continued on page 397)

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* These measurements were made in cold weather.

President's Page

ARDUOUS EFFORTS REWARDED

No one who attended the 16th Annual Scientific Assembly could help but be impressed by the quantity and quality of the program and exhibits. What wasn't so obvious were the headaches which are inescapable in such an undertaking.

Immediately prior to the Assembly, a strike threatened at the Mayflower Hotel where the meeting was to be held. This was fortunately postponed indefinitely two or three days before the Assembly opened. However, there was some trepidation as to what coöperation might be expected from the staff at the Mayflower. I am pleased to report that the service had never been better since the war began.

The Assembly requires many months of planning. In fact the work on this year's Assembly began immediately following the first of the year. Detailed arrangements had to be made for commercial and scientific exhibits. Several conferences were held with hotel representatives regarding facilities which would be necessary. Preliminary discussions at which the theme of the meeting was decided upon were followed by intensive efforts to obtain the best speakers for the scientific program. The public meeting, luncheons and social affairs, too, required careful planning. Registration was also a considerable task. A card was made for each member of the Society prior to the meeting so that all that would be necessary to register him was to remove his card from the file and give him his badge. This system has speeded up registration considerably.

I am sure I need go into no further detail to impress upon our members the effort which goes into each Assembly. Having a little understanding of this, I am sure our members will feel as I do that Dr. Arnold McNitt, General Chairman, and his Committee on Arrangements are due a hearty vote of thanks for a job well done. For this year's Assembly was tops. It fully justified the comment one physician made, "The best Assembly so far from any point of view."

Editorials

WASHINGTON NEEDS A HEALTH COUNCIL!

Contemplation of the needs of health and hospitals in the Washington Metropolitan Area brings up questions like the following:

In this area are there gaps in our health services, whether preventive or remedial?

Is there overlapping between health agencies?

Are hospitals and clinics all they should be?

Do these agencies operate in healthy rivalry or in costly competition?

Is there waste or duplication?

What should a "health center" be?

Should all "health centers" be Government operated?

Is there need for orderly and integrated planning for postwar construction of facilities?

Should all planning be left to Government?

Does the public have a stake in this planning?

Is there need for a strong planning body to aid in the coördination of all health agencies whether tax supported or private, to initiate new projects as needed and to eliminate duplication and waste of effort and resources?

Should the Washington Metropolitan Area follow the lead of certain other cities which have established health councils?

The answers to all these questions came out the same and gave the title to this article.

The idea of a health and hospital council is not new. Examples already exist: The Public Health Federation of Cincinnati and Hamilton County; the Cleveland Health Council; the Health and Hospitals Division of the Greater Boston Community Council (including the Boston Health League and the Hospital Council of Boston); the Hospital Council of Greater New York; and various types of councils in Denver, Chicago, Philadelphia, Pittsburgh, Louisville and other cities.

The following quotations from *Hygeia* describe the organization of health councils and the manner in which they function:

> "Health councils or health federations in any community are nonofficial organizations concerned with the promotion of public health. They are supported by community funds or private contributions and are able to promote and develop health objectives unhampered by politics and restricted only by financial limitations."
>
> "Such councils are composed of representatives of public and private health agencies in the community and persons interested in promoting the health of the city. Some councils are an integral part of social work activities, others are autonomous agencies associated and working in harmony with social agencies.
>
> "Political health organizations sometimes move slowly to meet a health situation, and the health council should be classified as the watch dog of health activities and problems in any community. Situated as an independent observer, the council can detect such faults as overlapping, duplicated or inadequate service and develop means to correct them. Council members are frequently aware of conditions existing outside metropolitan areas which, if not corrected, might affect the health and welfare of the entire community.
>
> "Before spending tax funds, official organizations must be shown the need for a particular health project. When this need is clearly demonstrated by a clear-cut statement of facts supported by the representative citizens of a health council, funds are usually forthcoming.
>
> "A health council supported by the medical profession and the public, with its membership representative of the community and with adequate funds for promotion, can establish an adequate health program in any city or town. Promotion is the ultimate aim of health councils; service is the obligation of the official agencies.
>
> "One should be fully aware of the fact that a health council is not a service organization. Its objectives are to develop projects to the service stage and then refer them to the proper organization for action; to coördinate

and correlate existing objectives; to constantly promote a program of health education—by printed material, talks over the radio and forum discussions."[1]

Further in the article appears this statement: "A health council must be autonomous to study and develop the health resources of a community."

Especial attention is drawn to the following quotations from an editorial recently appearing in the *American Journal of Public Health:*

> "The building of sound health programs for our local communities is too important to permit of any waste of effort or duplication. Every city of any size has a multiplicity of groups concerned with one or another phase of public health—official health departments, private health agencies, clinics, hospitals and professional organizations of physicians, dentists and nurses. Working together in a health council with full understanding of each other's programs, they can attain maximum results with limited staffs and funds. Such a council can serve as a forum for discussion of health problems, a medium for continuing analysis of community needs and for stimulating ways of meeting them, a means for avoiding duplication and friction, machinery through which citizen participation can be made effective, and sound community health programs can be formulated and kept up to date.
>
> "When competently directed, the health council has proved its worth. Operating, usually, as a division of the Community Chest or Council of Social Agencies, the council functions most effectively when it has a considerable measure of autonomy, its own paid staff, and a reasonable budget. Without these, it has little chance of success in any sizable city. With them, it can be an effective ally of the official department and a strong unifying force for promoting public health.
>
> "When Dr. Haven Emerson made a critical analysis of the Cincinnati Public Health Federation at its own request several years ago, he termed it the 'Community's Conscience in Health Matters.' Having the confidence of the Health Departments of the City and County, the faculty of the College of Medicine, the Academy of Medicine, the Dental Society, the Graduate Nurses' Association, and the backing of the Community Chest, this Federation has admirably demonstrated the effectiveness of sound coördination."
>
> "There is no magic in the word 'health council.' Only if such a council has vigorous, intelligent direction and financial backing can it develop effective teamwork in the health field."[2]

Not all health councils have been an unqualified success. The value of the deliberations of such a council will depend on the caliber and influence of the persons composing it. An influential council can accomplish the implementation of its recommendations.

Far-reaching results could ensue from the establishment of such a council in this area. Plans are now being laid for such an organization and immeasurable good should come to the community from it.

H. P. R.

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[1] McFarland, W. J.: Hygeia, 1944, **22,** 670.

[2] Editorial: Am. J. Pub. Health, 1944, **34,** 757.

"MEDICAL INSANITY"

A recent case of alleged homicide, in which the suspect is said to be an escaped patient from a mental hospital, brings up the perennial question of criminal responsibility. The subject is too involved for full discussion here, but at least one point may be examined.

We are told by the daily press that a mental examination will probably be made, which may result in a report of "legal insanity," or "medical insanity." This statement, said to emanate from the prosecutor's office, serves to emphasize the gap which exists between the law and medicine on matters relating to mental states, a gap which hopefully may some day be narrowed, or better still closed.

"Insanity" is a legal (not a medical) term meaning in general unsoundness of mind, but having various definitions within the law, depending on the situation—whether in relation to making a will or contract, requiring hospital care, marrying, or committing a crime. In criminal law, the "tests" come down to us from 1843 practically unmodified by one hundred years of psychiatric progress. The old test of "right and wrong" still stands in the District of Columbia, apparently defying the passage of time, just as the law still requires dangerousness as a qualification for commitment to Saint Elizabeths Hospital.

There is no such thing as "medical insanity." To ask the physician whether a given person is insane is to ask him to make a legal judgment—the proper function of a court. The psychiatrist is interested in mental disorder, in the springs of conduct, in the reasons why people act as they do. He may and does decide whether mental abnormality is present, and treats it when it is; it is not his function to say that the mental abnormalities of the defendant are such as to render him "not responsible," for the court must decide that on the basis of the psychiatrist's description of his findings and his interpretation thereof.

At times gleams of light are perceptible through the fog which surrounds the subject of "insanity" as viewed by the law. Progress, of course, must be slow in the legal recognition of medical truths, for the law cannot afford to lead; rather there must be a general acceptance of medical teachings before the law can incorporate them. The court takes "judicial notice" of what everyone knows, like the date, and the name of the President, but with regard to mental disorder both the public and the courts lag in a full acceptance of the fact that between the fully normal and the grossly abnormal lies a vast no man's land of deviations from mental health, minor or major, slight or serious.

The day may yet come when the courts will be inclined and at liberty to deal with the offender for the best good of society, regardless of his "sanity" or "insanity," having wide discretion as to the type of institution and the period of detention, if any, which are necessary for full social protection. When that happy day arrives the psychiatrist may play a more helpful role than merely being expected to advise on the defendant's "responsibility."

W. O.

OUR SINCERITY PUT TO THE TEST

The charge has been made that although organized medicine has made much of its experiments with prepaid medicine, many of its leaders look upon them only as a means of placating those who demand a change. It is said that they have no faith in "plans" of any sort and believe that inevitable failures will result in more firmly reëstablishing the time-honored methods of practice.

There may be leaders who hold such views but we cannot believe that there are many such. However, these few may arouse the suspicion that organized medicine, although it has endorsed the insurance principle in medical care, is not to be trusted. In other words, doubt may be cast on the sincerity of its efforts to make medical service more readily available to the people.

Very few voluntary sickness insurance plans sponsored by state medical societies have enjoyed any degree of success. Outstanding are the Michigan Medical Service and the California Physicians' Service. Even these are not "out of the woods." Several societies have one or more failures to their credit. This is not surprising and one can safely venture the guess that there will be many more. The important thing is that experimentation be continued until sound methods of distributing medical service are evolved.

A majority of the state medical societies have done virtually nothing along this line. Some are in the paper stage. These need stimulation from their national organization. Without aggressive leadership at the top, progress will be slow and in many places nothing will be done. Now that the American Medical Association's Council on Medical Service and Public Relations has been authorized to appoint a director of medical prepayment insurance, long needed leadership may be provided. This move is overdue but not too late if the executive employed is given the authority to do the job promptly and thoroughly.

Having expressed these views, it is only proper that the situation in Washington be examined. The Medical Society of the District of Columbia offered the ill-fated Mutual Health Service in 1939. It was a complete coverage medical service plan. Following several months of intensive effort and the expenditure of a considerable sum of money, the Service failed. There were many reasons for its failure which it is not necessary to recount here except to say that from them valuable lessons were learned. These should be helpful in the future.

It was said at that time by those who were critical of the Society that the Service was only a gesture. Of course, this was untrue for its sponsors were not only disappointed but very reluctant to admit failure. As might be expected, the Society membership was not too anxious to engage immediately in further experimentation.

Since that time, however, the Society through successive committees has continued its interest in prepayment plans. This year its Committee on Medical Care resolved to proceed with the development of a limited voluntary sickness insurance program such as has been most successful elsewhere. It sought the advice and coöperation of leaders in public health, business, labor and the professions. And it expects to submit its program for the consideration of the Society sometime this fall.

As stated previously, regardless of failures, we must go on with experimentation. It is only by this means that a solution will be found to our unmet medical needs. Of course, mistakes will be made. There will also be unjust criticism. Nevertheless, the only way to success in this field is the hard way. And we must all travel it.

In and Out of Focus

BY THE OBSERVER

Will Voluntary Hospitals Survive?

What have been the outstanding characteristics of the voluntary hospital in the past hundred years? In answering this self-propounded question, Dr. Alan Gregg, Director of Medical Sciences, Rockefeller Foundation, speaking at the Centenary Celebration at Butler Hospital, Providence, Rhode Island, on May 10, said: ". . . it was initiated by individuals and supported by private donations of time and money and its policy and programs of work were determined by private citizens in collaborative effort for the public welfare. . . . [it] has furnished the best example of leadership in medical care and exemplary administration in the development of the American hospitals. . . . [it] has set the standards for medical practice of every kind" and "has contributed to the advancement of clinical medicine. It has taught the physician, by nature none too tolerant of criticism and control, to work in teams and groups. It has played the determining role in creating the nursing profession" and has satisfied the urge of "sensible leaders who enjoy being helpful under any kind of circumstances."

"If the voluntary hospital has had any conspicuous defect," Dr. Gregg continues, "it is this: that despite its intensive excellence it has frequently been reluctant to see the complete picture of community need. Generosity and vanity sometimes twine upon each other: the outstretched hand betimes has a possessive grasp.

And the comfort of having agreeable companions in benevolence can blind such friendly companions to the inadequacy of their work.

"But in the main, clinical medicine in America owes no debt greater than to the voluntary hospital, that whether dominated by piety or by efficiency, has always held out to physicians and nurses the most loyal and devoted aid to their best efforts. That is the greatest value of the voluntary hospital. That is the significance or relationship to medicine most worth continuing and preserving in the future."

What about the future? Will the increasing rate of taxation of the well-to-do, who feel that they cannot now make benevolent gifts to the voluntary hospitals, jeopardize the voluntary hospital's existence? Dr. Gregg answers these questions as follows:

"It seems to me that the answer is: if the voluntary hospitals will so change their form of organization and their type of function as to retain or acquire values and relationships not possessed by the present tax-supported institutions they will survive on government subsidy and yet autonomous enough to satisfy their trustees and administrators. Otherwise they will take varying lengths of time to expire, depending on a wide variety of circumstances. The values and relationships I should like to see retained or acquired by voluntary hospitals are those related to initiative, independence, leadership and qualitative experimentation with new methods of medical care. In more explicit terms, the voluntary hospitals should take research and teaching as their peculiarly appropriate functions since research and teaching will always demand and usually secure a larger measure of independence, leadership, initiative and quality as contrasted with quantity of performance. Now to assume the functions of research and teaching, especially in interneships and residencies, involves stipulated and organic relationships with medical schools and universities, not as a merger but as a partnership. My personal faith is that society—even a heavily taxed society—will protect teaching and research from political and administrative interference more zealously and more constantly than it will shield mere hospital work. We want our own sons and daughters in their student years to have freedom and the best examples to follow—every generation wants that chance for its youngsters. And the importance of freedom for research will never lack champions.

"One further step the voluntary hospitals must take to assure their futures. Medical care is changing from the status of a private luxury or a blessed benevolence to the status of a civic right. As an important consequence hospitals are going to be organized on a regional basis and with a weight of public opinion that will override the intransigent independence of institutions that refuse to collaborate. Therefore explicit and attentive care should be given by the boards of voluntary hospitals to their role in an effective general scheme of medical care. I do not recommend that they fall over themselves to accede to the first plan that comes along, but I do believe that if with no recognizable and singular qualifications except those of pride and historical traditions they refuse to get into gear with a rational and well considered scheme of regional medical care they will invite their own decline and disappearance. Hospital insurance might delay the final failure—I cannot believe it would prevent eventual breakdown."

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Is This the Answer? One frequently hears the opinion expressed by physicians that medical societies are out of their field when they sponsor medical prepayment plans and that their sponsorship should be left to insurance companies. Most of those who have given the matter study will disagree with this on many counts.

Regardless of one's viewpoint, recent reports that a number of insurance companies are about to undertake an ambitious program along this line is of considerable interest. The *Bulletin of the Hennepin County Medical Society* (Minnesota) in its August issue comments in its editorial columns on these reports as follows:

"What could prove to be a thoroughly practical answer to the alleged, widespread demand for government-sponsored, tax-supported health insurance is now in an advanced stage of incubation under the supervision of an aggressive group of insurance executives. While no public announcement may be expected for possibly two months, there is some assurance that the plan will be in operation before the first of the year. And if present progress and enthusiasm continue, the proposal will be launched with a fanfare of publicity that will be devastating to the planners and the politicians.

"Briefly, the proposal is a low-cost form of indemnity, hospital and essential medical-surgical care insurance, available at the outset only to employed groups but which later will be expanded to enroll individual subscribers, to be offered by some two score established and reputable commercial insurance companies. It can be reported that representatives of thirty-eight companies attended a recent conference, that many more concerns have indicated their intention to join the sponsoring group. Presently a large staff of underwriters and actuaries is preparing the details of such plans while a group of executives is working out the financial structure. Whether uniform policies will be offered by the several companies with some form of reinsurance, or by a new concern, organized and financed by the group, are matters still to be determined.

"It should be emphasized that the practical value of this proposal cannot be appraised accurately until more details are revealed, until it is known definitely that this insurance will be offered on a strictly cost basis within the reach of those needing it most. If the decision is made to launch this project as a public service, then its potential good can be considerable indeed. If, at the final moment, profit aspects are permitted to take precedence over public service, then it would seem to be just another type of policy.

"Assuming that this insurance is offered on a public service, strictly self-sustaining basis, the financial resources of the sponsoring group plus the experience, sales organizations and prestige that could be mustered probably would mean absorption of existing Blue Cross and prepaid medical care plans. It would offer such comprehensive coverage that these plans simply could not meet its competition."

It is doubtful that insurance companies will offer this insurance on a cost basis. If they do, it will not necessarily be an answer to the proposed Government compulsory insurance program. Whether any form of indemnity insurance will be accepted as a substitute for medical service plans is also open to serious question.

We agree with the *Bulletin* that if insurance companies are going to contribute anything worthwhile in the sickness insurance field, they will have to make some real sacrifices and convince the public that they are rendering a public service.

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What Are Man's Best Years?

Sir William Osler's famous valedictory address delivered at Johns Hopkins in 1905 still provokes discussion. Osler, it will be recalled, described the period between the ages of 25 and 40 as the "fifteen golden years of plenty, the anabolic or constructive period, in which there is always a balance in the mental bank and the credit is still good." Most of the great mistakes in our social and political life, all the bad poems and bad pictures and not a few bad sermons he ascribes to sexagenarians.

Now comes Dr. Thomas Midgely, Jr., President of the American Chemical Society, with a more liberal viewpoint. In the main, he agrees with Osler but, as the *New York Times* comments, "Dr. Midgely is too sensible to ignore the achievements of men who are doddering along at 50 and even 80. Many of the great generals, among them von Moltke, Hindenburg, von Bülow and Foch, were all in their sixties when they distinguished themselves in battle. The careers of politicians have been equally striking, what with Gladstone and Palmerston serving as Prime Ministers at 80 and John Quincy Adams and Henry Clay still active as political leaders at the same age.

"These are not exceptions to Osler's rule. To Dr. Midgely the 'usefulness of old men is distinctly of a different nature from the usefulness of youth.' Imagination and initiative undoubtedly flag in middle life and old age. But there are compensations in the form of greater technical facility, wider knowledge, riper judgment. These are precisely the qualities of distinguished judges. We have only to think of Justice Holmes and the trenchant opinions that he handed down in his eighties. Because a man has reached the age of 40 the time has not arrived to clear off a place for him on the shelf of desuetude. We have the right to ask: Too old for what? Too old perhaps for composing great music, discovering a new principle in physics, writing a deathless poem, but not too old for leadership."

Dr. Theodore G. Klumpp recently addressed the American Chemical Society on a related subject, the span of human life. He declared it is "biologically possible for many of our children or our children's children to live in good health for 130 years.

"The fact that some individuals have been known to have lived for as long as 130 years," Dr. Klumpp said, "means that when we have learned more about the factors that influence longevity these factors can be influenced so that a great many more may be brought to that ripe old age. Indeed, those who might ordinarily obtain such long life may be able to live even longer. . . .

> "At the present time, we actually know pitifully little about the factors that influence the rate at which we go down hill. . . .
>
> "If you want to gain a comprehensive idea of what remains to be done, you need only consult the catalogue of the causes of death and the classification of diseases. Every cause of death and every illness suffered by man or useful animals is an unsolved problem.
>
> "In my opinion, we have been attacking concrete fortifications with pop guns. We have sent out skirmishing parties, when we should have placed vast armies in the field. We have thrown a few millions into this scientific effort when we should be carefully spending billions.
>
> "In comparison with research in other fields, plastics, metallurgy, petroleum, communications and aviation, medical research looks and is small time and amateurish.
>
> "We have been promised a fabulous postwar world abounding with mechanical improvements and fascinating new gadgets. But in the long run, what good are these gadgets, if we do not live long enough in good health to enjoy them?"

Which would indicate that if science meets Dr. Klumpp's expectations, the "golden years" to which Sir William Osler refers may come much later than they do now.

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Commission on Experimentation Urged

There has been a noticeable change in the atmosphere at the hearings of the Senate Subcommittee on Wartime Health and Education. Senator Claude D. Pepper of Florida, Chairman of the Subcommittee, has stated several times that he and his conferees have an open mind as to proposed innovations in medical practice. He says they are open to suggestions of all interested groups. That this is not merely a pose is shown by the fair and impartial manner in which the hearings have been conducted.

Senator Pepper would undoubtedly be the last to deny that he has had some strong personal convictions as regards the solution of the Nation's health problems. However, these have apparently been tempered by the testimony of individuals of varying experiences and different viewpoints.

Recently the Senator wrote the Medical Society of the District of Columbia, "I am doing what I can in my feeble way to make the future of medicine greater and better for the doctors and for the people."

Many well-known figures have testified before the Subcommittee in the past few weeks. Perhaps the most colorful was Mayor Fiorello LaGuardia of New York, who told of his health insurance scheme which is shortly to be placed in operation. No one, in the opinion of your Observer, was more effective than Dr. Leverett D. Bristol, Chairman of the Health Advisory Council of the U. S. Chamber of Commerce.

Dr. Bristol urged the creation of a national commission for experimentation as a preliminary to selecting the type of program which would ultimately become country-wide. It was suggested that Government health authorities, representatives of the medical profession and of labor and industry should be appointed to the commission which would encourage promising local medical care plans.

Dr. Bristol said, "What is needed in the fields of medical and hospital care is not 'socialized medicine' or 'state medicine' but better organized medicine; medicine which is so well organized that while it remains largely in the hands of individual or groups of private practitioners, it will reach rich and poor, city folk and country folk, children and adults, employed and unemployed, not only after disease has gained a foot-hold, but before disease has become apparent, and while the individual still is well and strong. More community-wide efforts, through adequate local planning agencies, also should be directed toward the coördination and improvement of hospital and other services in relation to community needs.

"Hospitalization on the periodic prepayment or insurance plan is now in operation in various states and cities and a further extension of such voluntary programs may be anticipated. Voluntary prepayment plans covering medical and surgical services, either separate or in connection with hospitalization plans, should be given a thorough trial.

"Further encouragement and financial support should be given to our voluntary hospitals operated by church organizations and non-profit associations. In the United States there is room for both Government and voluntary institutions. In any program which may be developed for the medical and hospital care of returning war veterans, the services of private practitioners of medicine and voluntary hospitals should be included in the scheme of things."

Our Medical Society has long urged that experiments with medical service plans should be stimulated and given support by our national organization. At its last meeting, the American Medical Association's House of Delegates authorized the Council on Medical Service and Public Relations to employ an expert to aid medical societies in the development of medical service plans. To date his employment has not been announced. We hope the Council will act in this matter before too long.

The Council might well give serious consideration to the proposals made by Dr. Bristol. It should be obvious that the development of an adequate health program is not a task for the medical profession alone.

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Our Medical Officers

The American public is coming to appreciate what a marvelous job our medical officers have done in this war. Largely due to their efforts, death rates from injuries and disease in the armed forces have been astoundingly low. Yes, we may well be proud of the splendid record of the Medical Corps of the Army, Navy and Air Forces.

Reports from the battlefronts reveal the high regard in which the medical officers are held by the common soldier as well as high ranking officers. Not only have they proven themselves good doctors but, as Lt. General A. A. Vandegrift said in an address before the Medical Society on Army-Navy Night, they have been courageous "beyond the call of duty."

Recognizing the fine performance of medical men with the armed forces, the *New England Journal of Medicine* warns, ". . . there are, unfortunately, a small number of medical officers in the armed forces who have adopted in their care of the sick and wounded a degree of callousness well calculated to arouse just resentment. Such an attitude on the part of a medical officer, rare though it is, may well cause dislike not only of the physician involved but also of the service of which he is a part. It is possible that such an attitude is fostered by misinterpretation of the rarely heard admonishment, 'Remember that you are an officer first, a doctor second.' A high-ranking medical officer of the Army,—a man of great experience and with many years of service to his credit,—when asked if a doctor entering the service should adopt such a motto, replied, 'If he does, Sir, he may make many enemies.'

"Every physician in civil life knows that a certain degree of detachment from a patient's plight must be developed if one is to retain one's objectivity. Every officer of the armed forces realizes that there are times—they may be few or they may be many—when his rank must come to the forefront of the situation. Every medical officer knows—as does his civilian counterpart—that there are times when one must crack down on a patient and perhaps be temporarily harsh. But it is well to remember that, as one medical officer of the Navy has said, 'a sick or wounded fighting man has something that is just too big for him to handle, and unless he can repose his confidence and faith in you, there is but little to which he can look forward.'

"To physicians about to enter the armed services—indeed to those who already are medical officers—it might appropriately be said: see to it that neither the strain of battle nor the fatigue of long hours nor the tedium of inactivity nor the restiveness of being in a comparatively minor post nor anything else deter you from the just and proper care of the sick and wounded soldier. Is he—whether wounded, ill or malingering—fundamentally different from his counterpart in civil life? Only in these respects: he is far from home; he is doing something that he does not like; and he may well have been through living hell."

To the vast majority of our medical officers on land and sea, these admonitions, though sound, are, as the *Journal* implies, superfluous. Many of them have gained a far deeper appreciation of their responsibilities under the stress and strain of war than anyone could who has not experienced battle conditions.

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Italy's Health Cause of Defeat?

"It is obvious that a healthy army and navy can be recruited only from a healthy population, and one may say without exaggeration that the public health of our nation furnishes the basis on which can be estimated the man power for the armed forces and for the war-production industries."

Thus, in a recent issue of the *New England Journal of Medicine*, Dr. Frederick F. Russell, Professor Emeritus of Preventive Medicine of Harvard Medical School, evaluates health as an important factor in the victory or defeat of a nation at war. He illustrates what happens when the health of the civilian population deteriorates by an analysis of the health situation in Italy.

"During the present war it has often been wondered why the Italian troops were not better warriors and why their campaigns have not been more successful," Dr. Russell writes. "Without knowing the reasons for the Italian failures, one may strongly suspect that the principal one has to do with public health in Italy.

"The Italian health services have never been particularly distinguished in spite of the fact that a few eminent men have held posts in them. A large part of the nation has for endless years been exposed to malaria of a particularly pernicious kind. Experience with the disease has demonstrated that chronic and repeated infections with malaria in endemic areas, such as southern and central Italy, produce a weakened population; not only is the health of the communities at a low level but also the economic condition of the people is depressed. Much of the southern Italian population is involved in a vicious circle of disease, undernutrition, poor economic status, poor education and, worst of all, a low state of morale and a hopeless outlook for the future. With better public health in Italy the whole course of the Italian war efforts might have been quite different. There is nothing new about this idea, for the decadence of classical Greece has been almost universally attributed to the invasion of the country by malaria at about the fifth century before Christ. The Greeks in their day could do nothing about this because no one had the necessary knowledge, but this is not true today. Malaria is now well understood, and if the Italians had used the available knowledge of the disease they could in all probability have controlled the greater part of it, just as has been done in this country."

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G. I. Joe a Healthy Soldier

Previously in these columns, reference has been made to the excellent health of our armed forces both here and abroad.

Late in August, in a nationwide broadcast, Brigadier General James S. Simmons, Chief of the Preventive Medicine Service of the United States Army, reported that the disease death rate among American soldiers of World War II is the lowest ever recorded for the Army and only one twentieth as high as that of World War I.

General Simmons pointed out that there had been no epidemics among American soldiers during this war despite the fact that they have been exposed to every known disease under difficult field conditions. He said United States troops "have experienced every kind of weather and climate and have lived among primitive peoples of the tropical world. In spite of all these handicaps, the sick rate has been comparatively low and the diseases mild."

"This is not just a matter of luck," General Simmons added. He credited the splendid record to the effective program of preventive medicine developed by the Surgeon General and carried out by the Medical Department of the Army. Vaccination of soldiers against smallpox, the typhoid and paratyphoid fevers, tetanus, yellow fever, plague, cholera and typhus have

(*Continued on page 398*)

PRELIMINARY REPORT OF OPA MEDICAL ADVISORY COMMITTEE

Hugh Hudson Hussey, M.D., F.A.C.P.
Chairman, Medical Advisory Committee, District Office of Price Administration

The appointment of Medical Advisory Committees to the local Offices of Price Administration is part of a national policy to insure proper consideration of requests for additional amounts of rationed foods made on account of illness. The procedure to be followed in making such requests is outlined in the statement by Mr. Davies, which follows this report.

At the time this is written, the Medical Advisory Committee of the District of Columbia has been functioning for about a month. Although this is a brief period of service and the experience is necessarily scanty, some facts are worthy of comment. To date 105 requests for additional rationed foods have been submitted for consideration. The types of illness have been quite varied, and in many instances the diagnosis, as stated by the physician substantiating the request, has by no means clearly indicated the reason for the need for the additional foods. In many other cases the need has been apparent in view of the diagnosis, but it has frequently been hard to understand why the additional foods had to be selected from the list of those rationed. However, the Committee to date has approved practically all requests, assuming that the physician undersigning the request in each instance must have sound medical reasons.

The 105 requests were undersigned by 75 different physicians. All but a very few are men engaged in practice locally. There were 62 physicians who signed 1 request, 6 physicians who signed 2 requests, 2 who signed 3 requests, 3 who signed 4 requests, 1 who signed 5 requests, and 1 with 8 requests. The frequency with which the various types of additional rationed foods were requested was as follows: rationed meat, 84 cases; butter, 54 cases; canned goods, 32 cases; cheese, 13 cases; and sugar, 3 cases.

The residential areas represented in the 105 requests could be determined by the numbers of the local Boards of the OPA through which they were cleared. The District of Columbia is divided into 16 local Boards. The locations of these local Boards and the number of requests from each are shown in the accompanying table. It is interesting that more than 50 per cent of the requests came from 3 Boards (20, 21, 32) serving the more desirable residential areas of the Northwest Section of Washington.

No conclusions can safely be made from the present brief experience of the Medical Advisory Committee. However, it is hoped that the facts that have been presented will serve to emphasize to each physician of the District that he can be of tremendous service to the food rationing program or of some detriment, depending on the amount of thought, discrimination and exactness with which he treats requests for additional rationed foods for his patients.

TABLE SHOWING NUMBER OF REQUESTS FOR ADDITIONAL RATIONED FOODS FROM 16 LOCAL BOARDS

Board No.	*Location*	*No. of Requests*
10	4th & E, N.W.	3
11	1740 Mass. Ave., N.W.	0
12	New Muncpl. Ct. 4th & E, N.W.	2
20	Western High School 35th & R, N.W.	19
21	Oyster School 29th & Calvert, N.W.	24
30	16th & Lamont, N.W.	3
31	Dennison School 13th & Allison, N.W.	9
32	Brightwood School Ga. Ave. & Quackenbos, N.W.	16
33	Brookland School 10th & Monroe, N.E.	14
34	Mott School 4th & W, N.W.	0
40	French Manual Training School 7th & G, S.E.	4
41	Eastern High School 17th & E. Capitol	3
42	Langdon School 20th & Evarts, N.E.	0
50	Library—7th & I, S.W.	5
60	Ketcham School 15th & Good Hope Rd., S.E.	3
61	Deanwood School Whittingham Pl. & Lane Pl., N.E.	0
Total		105

PROCEDURE FOR OBTAINING MORE RATIONED FOODS BECAUSE OF ILLNESS

CHARLES K. DAVIES, JR.
District Rationing Executive, Office of Price Administration

Any consumer whose health requires him to have more rationed foods than can be obtained by means of the individual war ration book may apply for additional points. The application must be made on OPA Form R-315 by the consumer or by someone acting for him. It may be made in person or by mail. The application must be accompanied by a written statement signed by a physician licensed by the laws of the state in which the certification is made. However, in case of pregnancy, a public health nurse employed by a federal, state or community health agency may sign such a statement instead. All such statements must contain a specific diagnosis of the applicant's illness or condition and must show why the applicant must have more rationed foods, the amounts and types required during the next ten weeks (or shorter period if the illness is of shorter duration), and the probable duration of the illness.

If the diagnosis is diabetes mellitus or active tuberculosis, and if the Board finds that the applicant's health depends upon his getting more rationed foods, it will issue certificates for the number of points necessary to get the additional foods needed during the next ten weeks. If the diagnosis is any other illness or if the applicant requires more rationed foods than the Board is authorized to grant, the application will be referred for decision to a Medical Advisory Committee of the District Office.

Any applicant who requires additional rationed foods for a period longer than the ten weeks for which points are granted may apply for additional points (in person or by mail) to the Board at the end of the ten-week period. However, the statement certifying the diagnosis of the illness need not be renewed more often than once a year, in cases of diabetes mellitus and active tuberculosis. In such cases the application shall be deemed to be a certification that the diagnosis remains the same as set forth in the written statement attached to the original application. If the applicant changes his residence before the time when he would have to renew the statement certifying the diagnosis of his illness, he may obtain the statement from the Board where it is filed and file it with the Board for the place where he may live.

At the present time, due to the fact that so many meats are point free, local Boards are permitted to issue, without special reference to the Medical Advisory Committee, the following additional points for health needs per week: for diabetes mellitus, 10 red points and 40 blue points; for active tuberculosis, 4 red points and 7 blue points per week. For both of these illnesses the physician's certification will be sufficient for a period of one year. In the case of pregnancy no additional points of any kind may ordinarily be issued by the Board. If additional rationed foods are requested in this type of case, it will have to be referred to the Medical Advisory Committee.

CALENDER OF MEETINGS

September 6	Subcommittee on Social Affairs, Annual Scientific Assembly
September 8	Committee on Arrangements, A.S.A.
September 11	Subcommittee on Exhibits, A.S.A.
September 19	Grievance Committee
September 20	Subcommittee on Diagnostic Clinics
September 25	Executive Board Subcommittee on Finance, A.S.A.
September 26	Committee on Public Health

MEETINGS

Wednesday, November 1

BUSINESS MEETING

Wednesday, November 8

The following program has been arranged:

"Treatment of Upper Respiratory Infections," RUSSELL L. CECIL, M.D., F.A.C.P., Professor of Clinical Medicine, Cornell University Medical College, New York

Wednesday, November 29

Speakers and subjects to be announced.

War Section

LETTERS FROM PHYSICIANS IN THE ARMED SERVICES

Editor's Note: The following letter was addressed to Colonel George L. Ball, Medical Corps of the Army Air Forces. Colonel Ball very kindly gave his permission to publish a portion of Major Kelly's letter to him in the Medical Annals.

From Major Edward A. Kelly, c/o Postmaster, New York City:

Dear George: Received your letter dated May 25th and enjoyed it immensely. Have had plenty more travels since I last wrote to you. At last we are in the front lines as far as a fighter outfit is concerned. We have moved twice since then and from what I can gather we are as permanent now as we will ever be in China.

The night before we left our last station we had a "Jing Bow" (bombing) and with about 16 Jap bombers they dropped bombs for over two hours. Set fire to a few shacks but no damage to any plane or personnel. They seem to never learn from experience for every bombing we have had they hit the same end of the field and in just about the same spot, so no damage has been done at any time. It surely feels as though the world is coming to an end while they are dropping their bombs.

We are at the end of the milk run as far as mail is concerned, so we may go as long as four weeks without any mail. That is the one thing that is most valuable on foreign duty. If you do not receive any news from home or your friends, then life is not worth living. We are constantly looking for transports and then racing to the field to find out if any mail is aboard. When mail finally does catch up with you, then you really have a batch to read and answer, which helps to pass away the time.

From Captain P. A. Bryant, c/o Postmaster, San Francisco, Cal.:

Dear Ted: I received the July news letter a few days ago and was indeed glad to hear that things are going along there at a reasonably sane pace. I know the doctors must be rushed off their feet, but we, too, have a lot of work to do at times. . . .

I hear that the summer has been terrific there. The heat is not what's so bad but the humidity really gets them down. Cool weather should be coming soon now though. I guess some of the more fortunate ones will even find time to go fishing. The Pacific waters afford good fishing most of the time, and with a great variety of fish. I have made many pleasant fishing trips since I have been in this area. Have even taken one deer hunting trip but was not lucky enough to bag one.

I wish to be remembered to the staff there. Tell them to keep the good work up.

From Captain John A. Swartwout, Fort McClellan, Ala.:

Dear Mr. Wiprud: Received your news letter of the 6th just the other day and was as glad to hear the news of the home town as I used to be when I was roasting in Panama.

As you can see, I have had another change of scenery and climate, but I like it here very much, probably because I am finally doing the work which I like most and have been trying to get into for three and a half years, namely, anesthesia.

I am the Chief Anesthetist in this 2000 bed hospital with two other anesthetists on the staff. We have quite an active surgical and obstetric service with plenty of all types of anesthetics to give.

Practically all the medical officers on the staff here are either on limited duty or have served a term of duty overseas so our staff should be fairly stable for the duration.

At last I am lucky enough to have my family here with me, even though the housing situation is acute.

From Captain Henry M. Lowden, c/o Postmaster, New York City:

Dear Mr. Wiprud: I have been meaning to write you for some time to express my appreciation for your newsy letters which help to keep us in touch with our home town and Medical Society.

I am attached to a hospital ship and have been over here in the Mediterranean almost a year and a half. We get around quite a bit which lessens the monotony of Army life, but we all hope this struggle will soon end. At present we are in Southern France.

We come in contact with many medical men but as yet none from Washington.

From Major George Tolstoi, c/o Postmaster, New York City:

Dear Ted: Every letter we receive from the states stresses our nearness to victory. It's difficult to see how the arm chair strategist can be so reliable when my *Washington Star* of July 19–31, just coming in, still talks about black markets and defections in the rationing plans. Still the closer one gets to the front, the less one knows, and we seem to hear only very little. Still we pin our faith on the Kiplinger Letter of Washington, Lloyd's of London, Pearson and Winchell—and what we see here—and pray like you that this first day of autumn ushers in an early victory. Vast as the Pacific is, many of us feel that the defeat of Japan can be accomplished sooner than appears.

Economics over here are all haywire. The French apparently have no confidence in the Germans since prices seem so disproportionate. Bread is 6 cents a loaf, but a decent doll that one might wish to send his daughter is $30. Perfumes are very inexpensive but these are not the prewar variety and the oil content is low. The people are very friendly. I visited Paris just a short while after its liberation. I was kissed on my cheeks once, but that time by a colleague

(*Continued on page 398*)

LISTEN TO **"DOCTORS COURAGEOUS"...**

MONDAYS 8.15 P.M. WOL

1260 ON YOUR DIAL

List of Doctors Lives Dramatized

JOSEPH LISTER	Asepsis
ELIZABETH ANDERSON	First Woman Doctor
HENRY HARNACK	X-Rays
GEORGE SAVA	Surgery
SIR JAMES PURVES-STEWART	Mental Courage
DOCTOR LAZEAR	Yellow Fever
ARTHUR SHADE JONES	Orthopaedics
EDWARD WILSON	Personal Courage
HORACE WELLS	Anaesthetics
SYLVESTER LAMBERT	Tropical Diseases
ROBERT KOCH	Anthrax
EDWARD TRUDEAU	Tuberculosis
PRESTON & CRAWFORD	Personal Courage
DOCTOR MCDOWELL	First Major Operation
EMILE ROUX	Diphtheria
FREDERICK LEWIS	Euthenasia
WALDEMAR HAFFKINE	Bubonic Plague
BERTHA CALDWELL	Bubonic Plague
RICHARD KOVAC	Social Work
ROBERT SLAUGHTER	Cholera
HARRIETT CROSSDALE	Personal Sacrifice
DOCTOR DARCH	Shell Shock
CAPTAIN RUTHERFORD	Blackwater Fever
JOHN MORTON	Heart Massage
ROLLA DYER	Typhus
JAMES CHISHOLM	Personal Courage
RONALD ROSS	Malaria
DOCTOR LIARD	Gas-gangrene
WILLIAM MAYO, SR.	Surgery
WILLIAM AND CHARLES MAYO	"
JAMES HARPOLE	Tetanus
COLE AND WEST	Tetanus
EDWARD JENNER	Small-pox
DOCTOR CONTAT	Infantile Paralysis
MANFRED SAKEL	Dementia Praecox
EDWARD DAVIDSON	Flesh Burns
LIONEL WHITBY	Pneumonia
SAMUEL HOWE	Blindness
EDWARD KINNEY	Personal Courage
JOHN MURRAY	Social Work
FREDERICK BANTING	Diabetes
GEORGE CARVER	Research
VICTOR HEISER	Tropical Diseases
ROY DAFOE	Dionne Quints
DONALD MERRITT	Personal Courage
ARNOLD CUSH	General
VICTOR HEISER	Malaria
DOCTOR DAVIDSON	Personal Courage
DOROTHY FEREBEE	Pellagra
JOHN WOODS	The Flying Doctor
DOCTOR COBURN	Rheumatic Fever
HARVEY CUSHING	Brain Surgery

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On The Home Front

The American College of Physicians is sponsoring a fall series of postgraduate courses. Cities selected for the meetings are Boston, Portland, Oregon, Minneapolis, New York City, Chicago and Philadelphia. Among the instructors for the session to be held in Philadelphia, December 4–15, are two members of the Society, **Dr. Herman E. Hilleboe and Colonel Leonard G. Rowntree, M.C., A.U.S.** Dr. Hilleboe will discuss "Newer Techniques in Tuberculosis Control," December 11, and Colonel Rowntree will address the meeting, December 13, on the subject, "Endocrine Disorders in Selective Service Cases."

The American College of Surgeons has cancelled for the third successive year its Annual Clinical Congress, which was to have been held in Chicago, October 24 to 27. The Board of Regents made this decision because of the great demands upon our transportation system in wartime. All present officers, regents, governors and standing committees will continue in office. War conditions permitting, the Clinical Congress will be held in the fall of 1945.

At the annual meeting of the Board of Regents which will be held later in the year, fellowship in the College will be conferred in absentia on the class of initiates of 1944.

The Southern Medical Association is holding its 38th Annual Meeting in St. Louis, Missouri, November 13–16, 1944. Meeting conjointly with the Association are the American College of Chest Physicians, Southern Chapter; American Society of Tropical Medicine; American Public Health Association, Southern Branch; and the National Malaria Society. All meetings and exhibits will be held at the Municipal Auditorium.

Dr. Herman E. Hilleboe will be guest speaker at the dinner meeting, November 13, of the American College of Chest Physicians. Further information regarding the meeting of the Southern Medical Association will be found elsewhere in this issue.

The United States Chapter of the International College of Surgeons held its Ninth National Assembly at Philadelphia, October 3, 4 and 5. **Vice Admiral Ross T McIntire,** Surgeon General of the Navy, addressed the Assembly, October 3 **Dr. Custis Lee Hall** presented a paper, October 4, on the subject, "Osteotomy for the Treatment of Ununited Fractures of the Femoral Neck." Dr. Hall also presided at one of the meetings.

The Abbott Laboratories, of North Chicago, Illinois, has presented the people of the United States with 100 paintings and drawings depicting various phases of naval medicine. The collection, which was shown to the public for the first time, September 10, at the National Gallery of Art, is now on tour throughout the country. The paintings represent the work of six artists, David Stone Martin, Irwin Hoffman, Joseph Hirsch, Kerr Eby, Carlos Andreson and Julian Levy.

The American Society for the Hard of Hearing announces the observance of the 18th Annual National Hearing Week, October 22–28. Its Silver Anniversary will be observed, November 10, 11 and 12, at the Waldorf-Astoria, New York City. The theme for this year's National Hearing Week is "Twenty-five Years of National Service in the Cause of Better Hearing."

The Section on Gastroenterology held its first fall meeting on October 2 at the home of Dr. William M. Ballinger, Chairman of the Section. Drs. William Earl Clark, J. Russell Verbrycke and John A. Reed participated in a round table discussion on "Rest, Antispasmodics and Sedatives in Gastrointestinal Conditions." A buffet supper was served preceding the scientific session.

George Washington and Georgetown University Hospitals were granted funds in the amount of $4,100,000 by the Federal Works Agency, September 8, for the construction of two 400-bed hospitals.

George Washington University will receive $2,700,000 of the grant for construction of a hospital on a square south of Pennsylvania Avenue bordering Washington Circle, 22nd, 23rd and I Streets, N.W. The University will give the Agency $350,000 in cash as well as the proceeds from the sale of the present hospital building. Land for the new hospital will be acquired by FWA through condemnation. Since the Plaza Hotel on Washington Circle would not be required for some time as part of the site, present plans contemplate its inclusion in the condemnation proceedings but that its operation as an apartment house be continued with receipts to be turned over to the Government by the University.

Georgetown University will receive $1,400,000 of the grant and will turn over to the Agency $600,000 in cash in addition to furnishing land for the building. The hospital will be constructed between the Medical School and the Glover-Archbold Parkway on the grounds of the School at 3900 Reservoir Road, N.W.

Actual cost of the new hospitals will be more than the FWA grant and the additional funds needed will be provided by the Universities. Furnishing and equipping the hospital is included in the grant for Georgetown; in the case of George Washington it will be borne by the University, which is estimated to amount to about $300,000.

The 121st academic session of **George Washington University** opened September 18. Dr. Cloyd Heck Marvin, President of the University, welcomed the students. Dr. Walter A. Bloedorn, Dean of the Medical School, presided. The principal address was given by Rear Admiral William Chambers of the Naval Medical Corps, who returned recently from two years in the Pacific to become medical officer in command of the Naval Medical Center at Bethesda, Md. His subject was "War Medicine in the Pacific."

Speakers at the luncheon which followed, at the Mayflower Hotel, included Major General George F. Lull, Assistant Surgeon General of the Army, Rear Admiral Luther Sheldon, Assistant Surgeon General of the Navy, Colonel Francis M. Fitts, medical officer for the Army Specialized Training Program, Comdr. Louis M. Harris of the Naval Medical Corps, and District Commissioner Guy Mason.

On September 19, 75 students, including seven women, received the degree of Doctor of Medicine at convocation exercises held on the Lisner Terrace. All but three were awarded commissions in the armed services.

Georgetown University Schools of Medicine and Dentistry held commencement exercises, September 17, for a class of 120 graduates. Captain Bartholomew W. Hogan, commanding officer of the Naval Hospital at Annapolis, Md., delivered the commencement address. Lt. Colonel James E. Phillips, M.C., U.S.A., awarded commissions as first lieutenants to 33 graduates in the Medical Corps of the Army of the United States and to 16 in the Medical Corps, U. S. Army Reserves. Eleven of the graduates were commissioned as lieutenants (j.g.) in the Medical Corps, U. S. Naval Reserves by Captain E. M. Williams, U.S.N. Commissions as first lieutenant in the Dental Corps of the Army of the United States were conferred upon 19 graduates from the Dental School; 27 were commissioned lieutenant (j.g.) in the Dental Corps, U. S. Naval Reserves. The usual academic degrees were conferred on the entire class, which included four civilian graduates in medicine and ten in dentistry.

New MEDICAL BUREAU subscribers will henceforth be reported in the MEDICAL ANNALS. Since the last telephone directory went to press, the following physicians have subscribed to the Alternate Listing Service: Drs. Samuel Dessoff, William F. O'Donnell, Philip O. Pelland, Thomas R. Rees, Frank R. Shea and J. Ogle Warfield, Jr.

The next directory will go to press about December 1.

At an organization meeting of the **Health Division of the Council of Social Agencies for the District of Columbia and Vicinity**, September 29, Dr. Herbert P. Ramsey assumed his duties as Chairman. Vice Chairmen are Mr. Randolph C. Bishop, Executive Secretary of the National Dental Hygiene Association, and Mr. Howard Strong, Executive Secretary of the Health Advisory Council of the U. S. Chamber of Commerce. Miss Elizabeth Harvey is Executive Secretary of the Division.

Among members of the Society serving on the newly created Coördinating Council are Drs. Frank D. Costenbader, Winfred Overholser, George C. Ruhland and Ross T McIntire. Mr. Theodore Wiprud, Secretary of the Society, is also a member.

Dr. A. R. Abarbanel has been awarded the Foundation Prize by the American Association of Obstetricians, Gynecologists and Abdominal Surgeons for the best original research among the younger members of the profession. He was guest of honor of the Association at its annual meeting in Hot Springs, Va., September 7. He read a paper before the meeting, entitled, "The Spasmolysant Action of Magnesium Ion upon the Tetanically Contracted Human Gravid Uterus."

Dr. Winfred Overholser addressed the State Medical Society of Wisconsin at Milwaukee, September 19, on the subject, "Psychiatric Problems in the Aged."

Dr. Joseph S. Wall discussed poliomyelitis at a luncheon meeting of the Soroptimist Club, September 20.

On October 8, **Dr. Frank D. Costenbader** presented a paper at the meeting of the American Academy of Ophthalmology and Otolaryngology which was held in Chicago, October 8 to 11. The subject of his paper was "The Causes of Failure in the Treatment of Squint."

Theodore Wiprud, Secretary of the Medical Society, gave two lectures to the senior medical students of Howard University School of Medicine on October 24 and 26. He discussed efficiency in the doctor's office and the keeping of financial records.

Major Alfred Golden, M.C., U.S.A., who has been stationed at the Army Medical Museum for the past year, has been transferred to the Division of Health and Sanitation, Office of the Coördinator of Inter-American Affairs. Major Golden will shortly be assigned to duty in Latin America to study the pathology of certain tropical diseases.

Colonel James E. Ash has been appointed Director of the Army Institute of Pathology, Army Medical Museum. His title was formerly that of Curator. He recently made an extended trip through the North African and other theatres of war in the interests of the Museum and Medical Arts Services. The Museum is undertaking to supply all medical schools in the United States and Canada with material for research and training in tropical diseases.

Lt. Colonel Balduin Lucke, who was Acting Curator during the absence of Colonel Ash, has been named Deputy Director.

Dr. Dorothy V. Whipple has been appointed physician to the Franklin Sherman School, McLean, Va. The appointment was made by the Fairfax County School Board at the request of the Parent-Teacher Association.

Sister Elizabeth Kenny demonstrated her methods of treating cases of poliomyelitis at Children's and Gallinger Municipal Hospitals, September 1. She addressed a gathering at the Statler Hotel, September 2.

Dr. George C. Ruhland presided at a dinner held in her honor at the Statler Hotel, September 1, which was attended by physicians and laymen interested in preventing paralysis.

On September 1 members of the **Doctors Group** subscribing to benefits under **Group Hospitalization, Inc.,** numbered 394. The books will be open again to new members, March 1, 1945.

BOOK REVIEW

Rehabilitation of the War Injured: A Symposium. William Brown Doherty, M.D., and Dagobert D. Runes, Ph.D., Editors. Pp. 684, illustrated. Price, cloth, $10.00. New York: Philosophical Library, Inc., 1943.

This text is a symposium on the care of the complications and late sequelae of war injuries. The first part of the book is devoted entirely to the neurologic and psychiatric complications of head injuries. These discussions present important diagnostic and therapeutic measures for such complications as traumatic epilepsy and traumatic headache. There are two important chapters in this section on occupational treatment in the care of these patients.

The second chapter is devoted entirely to reconstructive plastic surgery of the face. The work presented is not new but is primarily a summary of the technics used for plastic work. This work does not represent only studies of war injuries. A major portion of this is exemplified by civilian practice and experiences.

Under the section on orthopedics, the after care of amputations, arthroplasty of the hip, and leg lengthening are the three major subjects discussed.

The next two chapters are primarily discussions of physiotherapy, occupational therapy, and vocational guidance of the wounded. The physiotherapy chapter stresses the importance of massage, exercises, and the uses and abuses of splints in the treatment of nerve lesions.

The following chapter is devoted entirely to education, employment, vocational guidance of all kinds of injuries, and an attempt is made to show a pattern for the guidance of these patients back into civilian life.

Under miscellaneous, there is a short section on immersion-foot and a discussion of the mechanism and the treatment of this vascular occlusive disease.

This text, the reviewer feels, is primarily a book for those working in these fields and not one for the average general practitioner. J. J. W.

FREDERICK ALEXANDER FENNING, LL.B., LL.M.

(1874–1944)

Frederick A. Fenning, Honorary Member of and former Counsel for the Medical Society of the District of Columbia, died September 17, 1944 at his home in the Kennedy-Warren Apartments.

Mr. Fenning was a native Washingtonian, born October 23, 1874, the son of James Alexander and Mary Anderson Fenning. He received the degree of Bachelor of Laws from National University Law School in 1900 and the degree of Master of Laws in 1901. Following his graduation he established a private law practice which he continued until his death.

He was commissioned a Captain in the Army's Quartermaster Corps in World War I and resigned with the rank of Colonel in 1919. During 1925–26 he served as District Commissioner under President Coolidge. He was a Director and member of the Trust Committee of the National Savings and Trust Company; a former Director of the Washington Board of Trade; from 1915 to 1925 a member of the District of Columbia Board of Medical Supervisors; and from 1921 to 1927 a trustee of American University. A former Vice President of the American Bar Association, he served on several occasions as the Association's general counsel.

Frederick A. Fenning, LL.B., LL.M.

From 1924 to 1938 he was Counsel for the Medical Society of the District of Columbia. Since his resignation in 1938 he has served the Society as Advisory Counsel. In recognition of his services the Society elected him an Honorary Member, January 6, 1926. He was also an Honorary Member of the Medical Society of St. Elizabeths Hospital. For many years he was affiliated with the District Bar Association as well as other professional and fraternal organizations.

Mr. Fenning contributed a number of articles to law and medical journals on the legal aspect of insanity and medical jurisprudence. He wrote the chapter on "Legal Measures in Their Remedial Bearings" included in White and Jelliffe's book on "Treatment of Nervous and Mental Diseases," published in 1913.

He is survived by his wife, Mrs. Blanche Hine Fenning; a daughter, Mrs. Walter L. Wright, Jr., of Washington; a son, James Frederick Fenning, of Bridgeport, Conn.; and a brother, Karl Fenning, of Washington.

CHARLES HENRY TILGHMAN LOWNDES, M.D.

(1866–1944)

Rear Admiral Charles H. T. Lowndes, U.S.N., retired, former Commandant of the U. S. Naval Hospital, died September 25 at the Naval Hospital, Bethesda, Md. He resided at 2100 Massachusetts Avenue, N.W.

Admiral Lowndes was born in Baltimore, Maryland, July 7, 1866. The following year he entered the Medical Corps of the U. S. Navy as Assistant Surgeon. He came to Washington in 1914 to take charge of the Washington Naval Dispensary, and by 1919 had risen to the rank of Rear Admiral. After serving several years in the Third Naval District, he returned to Washington in 1923 to take over command of the Naval Hospital, retiring in 1929.

Following his retirement he served as Medical Director of Georgetown University Hospital from February, 1929 until August, 1930. From 1930 to 1933 he was a member of the Board of Indian Commissioners. He held membership in a number of military and medical organizations, including the Military Order of the World War, the United Spanish War Veterans, the Military Order of the Carabao, and the Association of Military Surgeons. He was an Associate Member of the Medical Society of the District of Columbia from 1930 until his death.

A son, Charles L. Lowndes, a student at Duke University, Durham, N. C., survives him. His wife preceded him in death in 1928.

(*Continued from page 372*)

12. Menninger, K. A.: The Human Mind, 2nd ed. New York: Knopf, 1937.
13. Putnam, J. J.: Dream Interpretation and the Theory of Psychoanalysis, in Contributions to Psychoanalysis (see ref. 1).
14. Stekel, W.: Sex and Dreams; the Language of Dreams. Boston: Badger, 1922; The Interpretation of Dreams, vols. 1 and 2. New York: Liveright, 1943; Technique of Analytical Psychotherapy, trans. by E. and C. Paul. New York: Norton, 1940.
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(*Continued from page 376*)

respects. Splenomegaly to my knowledge has never been reported in the prodromal or grippal stage. Although the clinical picture conforms fairly well with what is now known as the meningoencephalitic form our unfamiliarity with this type in 1941 caused considerable difficulty in differential diagnosis, especially since what may be classified as an organic psychosis dominated the picture after the first week of illness. There had been no previous reports of psychosis with this disease to my knowledge. This case was also unusual in that the virus was demonstrable in the spinal fluid 23 days after the development of meningeal symptoms and approximately 38 days after the onset of symptoms. Unfortunately we were unable to obtain blood for antibody studies at a time when they could have been expected to be positive.

The fact that this man, when first seen after the first 3 weeks of his illness, might easily have been mistaken for a hebephrenic dementia praecox patient raises the question of whether this error does not frequently occur.

(*Continued from page 379*)

of the vulva is very suggestive of dilated lymph spaces. The congenital and unprogressive nature of the disorder, together with the peculiar distribution of the edema challenges the imagination. We think the most probable explanation of the basis of the disorder is an anomaly of development of the lymphatics which has resulted in lymphangiectasis. Perhaps there has been failure of development of the smooth muscle fibers in the walls of the peripheral lymphatics of the right side which has produced loss of tone and resulted in a relative obstruction of the lymphatics as they enter the normal lymphatics of the trunk, or perhaps the valves of the lymphatics, so important in the forward movement of lymph, have failed to develop in the vessels of the involved parts of the body.

SUMMARY

A case of congenital hemi-edema, apparently the first in medical literature, has been reported. The edema involves the right upper and lower extremities, the right side of the vulva, and probably the right side of the head, neck and torso. It is probably a lymphedema, the result of a developmental anomaly. Treatment with ammonium nitrate and mercupurin and the wearing of an ace bandage on the lower extremity has reduced the edema.

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(*Continued from page 389*)

made these diseases virtually nonexistent. However, some meningitis, pneumonia and mild influenza had occurred but the death rates had been insignificant.

"Malaria, our No. 1 hazard overseas," he stated, "has been controlled at home. Formerly, it caused much illness in certain tropical theaters but practically no deaths, and the disease has now been much reduced even in such regions.

"The Army's program of preventive medicine has paid enormous dividends by conserving our military manpower. Undoubtedly, it will also contribute richly to the future welfare of our country."

★

Candidate Dewey on Medical Care

Speaking at Los Angeles on September 22, Governor Thomas E. Dewey made known his views on "how we are to obtain greater security for the men and women of this country in their personal lives and what the United States Government should do about it."

The Governor had this to say about medical care:

> "We must help to develop a means for assurance of medical service to those of our citizens who need it, and who cannot otherwise obtain it. This is a task that must be carried out in coöperation with our medical men. There can be no group better able to advise on medical care than the medical profession. Yet, unhappily, this is the very group which the New Deal has managed to alienate.
>
> "Our free and independent medical profession has advanced medical science in America ahead of every other nation in the world. Its freedom has made it great. It should be encouraged, not discouraged.
>
> "Let us enlist the leadership and aid of the doctors of America in organizing our private and public hospitals as well as our other services into a fully effective system to protect the health of all our people."

(*Continued from page 392*)

whom I had rescued from detached service. Still, if I were better looking, my experiences may have been more interesting. A striking observation is the scarcity of young men. That will be a problem. The potentialities are great and if postwar plans are not bungled, this may not be such a bad world after all.

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII *November, 1944* NUMBER 11

MAINTAINING MORALE IN FIGHTING MEN AT SEA*

COMMODORE ARTHUR W. CLARKE, D.S.O.
Chief of Staff to Admiral Sir Percy Noble, Head of the British Naval Delegation in the United States of America

IT IS with some apprehension that I address an assembly of experts such as yourselves today. Prevention is as much the province of the medical profession as cure, and undoubtedly the prevention of deterioration in morale has angles which can be said to fall directly within the scope of the medical profession. Upon that aspect, as a layman, I am hardly competent to speak.

On the other hand, the maintenance of morale can be considered on a broader plane, and it is this general aspect, with particular reference to morale at sea, upon which I have been asked to talk to you. The successful prosecution of the profession of the sea requires a sound knowledge of men and is indeed an essential prerequisite for the proper exercise of officer-like qualities. My justification for addressing you is that I have now had thirty years active service in my Navy, a thirty years which I would remind you has covered ten years of war. In that time I have had ample opportunity to get to know the personnel, and to learn of their reactions to conditions and circumstances.

The maintenance of good morale is an essential requirement if a ship is to be efficient and capable of dealing properly with every call that may be made upon her. Morale is, of course, not the only consideration, but invariably a ship with a high morale will achieve more than another, particularly in times of stress and emergency. It is evident, therefore, that the subject of morale is constantly in the forefront of the minds of the Higher Direction, the Commanding Officers and all others who take their duties seriously.

The fundamental solution of this problem of maintaining morale is primarily one of developing and keeping the men's confidence in a professional and in a personal sense and of ensuring as far as at all practicable that they are happy and satisfied in their work. This is a fairly simple interpretation which is not always so simple to implement and sustain.

There are a number of factors likely to disturb this ideal. First and foremost, the aim will obviously not be achieved if the men believe their officers to be inefficient, slack, or indifferent to their welfare. Physical discomfort and/or boredom are also disturbing factors. Equally so is the development of envy in regard to others who may be apparently privileged or better placed in some respect. Finally, if defeatism raises its head, morale will be quickly affected. While the forementioned conditions may in some respect or another apply in certain circumstances in times of peace, their presence in war has a greater and more rapid deleterious effect.

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* Address delivered at the Sixteenth Annual Scientific Assembly of the Society, October 5, 1944.

To explain this one must compare peacetime with wartime conditions as they apply to my Navy, and for that matter as they also apply in most respects to any other Navy. In the British Navy as it is constituted in peacetime, the Service is a voluntary one. That is to say, personnel volunteer to join the Service for a term of years. This term of years, therefore, provides them with a considerable period of time during which they have security of conditions. They become, strictly speaking, professionals of their own free will. More than that, the men who do select the sea as their profession are inducted into it at a youthful age and are bred up slowly but surely in the ways of the sea. While they are serving, the seagoing conditions cannot be called arduous, and leave is regular, or, at any rate, the future probabilities as regards leave can be gauged with reasonable certainty. The officers are all long-service regulars, carefully selected and trained. The inefficient ones are not likely to last long. Parallel with this the whole naval community is relatively small, and as time goes on that community gets to know a good deal in a personal sense about one another. Finally, in time of peace there is no danger worth considering.

Now let us compare that situation with the position which arises in war. First, there is an immediate expansion in the number of personnel. This expansion leads to an ever increasing dilution of what I choose to call the regular Navy by personnel who cannot be strictly called volunteers. They may have expressed a preference for the sea, but had it not been for war they would have continued to pursue their ordinary vocations. Instead they have been conscripted and many of them find themselves at sea.

The circumstances of war mean that the new recruits cannot be as gently and as thoroughly introduced to their new life as would have been the case in the more leisurely days of peace. As the war proceeds, the Navy becomes, therefore, in fact, manned largely by civilians in uniform. Of course, with experience they develop rapidly into sailors in the true sense of the word, but while they are in the transitory period they may be potentially unstable. In any case, except for a certain proportion of them, the whole business is an interregnum as far as their personal life and ambitions are concerned.

There is a similar dilution in officers with a consequential unavoidable leavening of officers who do not possess all the ideal qualities, and who, through ignorance or inferiority complexes, cannot always exercise in every respect that indefinable quality of successful power of leadership.

I hope that no one will misunderstand me in what I have just said. I am not for one moment suggesting that these men who become wartime officers are not up to their job. This is very far from the case in my Service. One of the most outstanding things of this war has been the way in which tens of thousands of temporary officers have shown their ability to exercise their recently acquired responsibilities successfully. At the same time the rushed circumstances of their training and the conditions of war have often made it difficult for them to gain the proper mastery of all angles of the profession. Consequently there has to be a greater centralization of some aspects of responsibility on the relatively few officers with longer naval experience.

Another obvious difference between war and peace is that the seagoing conditions are more arduous, and to the uninitiated these conditions are often more uncomfortable than they had dreamed of. Seasickness is a subject for amusement on the stage. It is no joke when experienced. Seagoing in time of war means close confinement for long periods. This condition of living wants some getting used to, and new men take a little time to settle in.

Leave, a subject always in the forefront of men's minds, is infrequent and often unpredictable. It will be obvious to you that the service of a ship cannot be subordinated to leave requirements. Opportunity, therefore, for recreation and leave is governed largely by calls upon the units and their whereabouts in relation to facilities for that leave and recreation. Parallel with this uncertainty in regard to leave is the inevitable increase in time of war of home worries. That has been quite an important fact as regards the British Services. There has been natural anxiety at times in regard to what may have happened to the individual's family as a result of enemy activity. Equally, the change in the individual's financial situation which may have been brought about by his being called up for war service can give cause for concern to him. This type of concern can be aggravated if mails are, as they often must be, irregular.

Segregation, with its separation for long periods from the normal amenities of life, also produces in war the alleged problem of sex starvation. I do not want to make too much of this, because I do not think there is all that to make of it. But if we think of it in the most general terms it means that men who have been accustomed to ordinary life ashore are suddenly deprived for most of their time of the normal companionship of the opposite sex. I will not make any jokes about distance lending enchantment, or the like, but it is a factor to be remembered.

The maintenance of health is not so easy in war as in peace. Ships are often almost hermetically sealed for long periods against the rigors of the weather. In any case, all ships have to be darkened every night. There is lack of opportunity for exercise, and generally it is an irregular life. It takes even time in peace to acclimatize oneself physically to a ship-borne life. Ill health has an obviously bad effect upon the morale of the individual.

Evidently fear is something that has to be considered. Every man is afraid, but his fear can be much aggravated if he is inexperienced in what to expect.

Above all, war at sea largely comprises long periods of boredom when it is difficult for many to understand why they must be subjected to that monotony and discomfort. Indeed, it will be the absence of action which will contribute more to a feeling of frustration and a consequent drop in morale than almost anything else.

It would be dangerous to try and draw distinctions between one sort of naval war service and another. Each will find that certain of the factors to which I have just referred are having a greater effect than others, but they all must be watched and considered, and to underline the last of these factors which I have mentioned, I will paint very shortly a typical example. I would have you imagine that you are serving in one of our cruisers normally a part of the British Home Fleet. In that ship there are some 800 men. You live day after day in an area of living quarters not more than 200 feet long and some 60 feet broad. Of course, there are several decks, and men can spread out here and there elsewhere in the ship to a certain extent, but the fact is that you are packed like the proverbial sardine. That Fleet of which your ship is a part is based in an obscure northern port with no normal amenities ashore at all. Indeed, even if there were these amenities, the opportunity for taking advantage of them would be transitory, for the sea time is considerable. That sea time is carried out in what some naval officers claim to be the worst weather in the world, that of the great North Atlantic, Norwegian Sea and Arctic Oceans, wintry seas which stretch from Scotland, west to Greenland, northwards to Iceland and northeast to Russia. It has been quite a regular thing for such a cruiser to be unable to give the men leave during periods of nine months or more. It has equally often been the case that during the whole period that ship has not had an opportunity to fire its guns in anger. Yet every night and day at sea she has to be absolutely ready and "on her toes." Often leave only comes about in the end because the ship has been damaged, either by the weather or by mines or by a torpedo from a submarine. The leave is, of course, just as welcome, but there remains always uncertainty as to when leave will come. In such a cruiser one can almost literally feel the morale lift when it is found that on some occasion of going to sea she is at last heading to an area where it is known there is a probability of action. Yet the ordinary humdrum service, largely preventative in its intention, was just as important.

One angle of this condition which applies to ships of the Fleet to which I have referred is that you are in fact stationed so close, as the crow flies, to the home amenities. You can look across the water from the normal base and see the mainland on the horizon. The knowledge that in less than 24 hours you could be home if leave could be granted is exasperating. While that temptation through proximity does not apply during service abroad, yet on the other hand home leave is then necessarily even more infrequent. Many ship's companies have not seen their home shores during this war for three years or more. These absences are felt the more by those who are the less accustomed to the sea life.

Some cures are simple enough, and self-evident. Many require coöperation from outside the Service. All require constant attention.

Simple and obvious requirements which must be met are such as the provision of good and ample food, well cooked and decently served, adjusted to suit the climatic conditions. This is a matter largely of careful internal organization and proper supervision. Again, payment must be made regularly, and the personnel must be given full opportunity to understand their pay and the whys and wherefores of any fluctuations. This is also easy enough to arrange. Similarly, good internal organization can insure the maximum general comfort in living within the limits of the facilities it is possible to provide on board. Men must have opportunity and room for cleaning themselves and their possessions. The difficulty always is in designing a ship to balance these amenity requirements against the space necessary for the ship's fighting equipment. Notwithstanding all proper efforts that may be made to deal with these evident necessities, man, being what he is, will have complaints from time to time. It is essential that these complaints should not be bottled up to breed discontent and that there is efficient and proper machinery for their ventilation. Of course, the Service recognizes this and that machinery exists. Newcomers, however, often do not know the right way to go about putting forward their complaints. Again we come back to the requirement of a well organized ship, so that they are informed of what they can do, and so that the complaint as soon as made is fully investigated with a view to redress if there is justification. It is important that all officers and subordinates realize that it is their duty to help the ignorant and to assist in putting things right by reporting at once if they see anything wrong, preferably even before that wrong has got to the stage of generating a state of complaint.

Health checks should be a routine, and shore exercise encouraged whenever circumstances allow. More than that, the ships' doctors must be constantly on the lookout for indications of bodily or mental ill health with a view to them themselves taking immediate steps, or to suggesting to the Commanding Officers the sort of action which could improve matters. If the circumstances preclude the most desirable action, then it is a good thing that all are informed why that action is for the time being impossible.

Everything should be done, compatible with the exigencies of the ship's service, to provide entertainment on board for the ship's company. An obvious one is the movies; and they must be first rate. Concerts can be organized, reading matter obtained through subscription or charitable channels; and there should be sufficient equipment on board for card playing and other similar minor amusements. Apart from what one might call organized amusement, the men should be encouraged to organize entertainment for themselves as far as possible, and in this they should know that they will always get the assistance of their superiors as far as they themselves want it.

There is always a section of the men who will not be content to occupy the whole of their leisure time lightly. This particularly applies to those short service entries who have some future goal ashore when the war is finished, at which they are aiming. They must be encouraged to form classes for study, and they ought to be provided with the necessary space where they can work in quiet and seclusion. There are a number of scholastic organizations ashore which are ready to provide correspondence courses to meet just the requirements of these men.

As regards leave, it is important that the men should understand why leave cannot be given in the many circumstances, when, without that knowledge they might imagine the decision depended upon the whim of their Captain. This understanding is all part and parcel of the broader understanding of what their ship, their squadron, their Fleet, and the whole Navy is doing, and why. I will return to that in a moment, but I want first to conclude the subject of leave by emphasizing the undesirability of raising false hopes of leave possibly with a view to gaining some momentary advantage. Leave, generally speaking, should not be used as a bribe. Finally, if the announcement of forthcoming leave has been made and then some unforeseen circumstance prevents the giving of that leave, it is vitally important that the personnel should receive a proper and early explanation of the causes which have changed the situation.

Probably the most important thing to which too much time cannot be devoted is that of getting the more ignorant men to understand why their lives have been so drastically upset, what, as one might say, they are fighting for, and of the part which they themselves are playing with all its consequential difficulties and discomfort. Lectures and talks, both personally direct to the men, and over the ship's radio, are the answer. Discussions and debates should be encouraged, and the provision of suitable literature which will appeal is necessary. This is not propaganda; in fact, the subject should not be rammed down their throats, but with a bit of an effort the men can be encouraged to think more for themselves. As they do, they will, like Oliver Twist, ask for more.

Parallel with this rather high plane action, it is equally important that the ship is so organized that the men are kept informed of what the ship is doing, of what the ship is going to do (as soon as requirements of security permit) and what is actually happening while she is at sea. The more this is done, the greater will be their confidence in their superiors. You must remember that a high percentage of every ship's company, and this percentage is the highest in the biggest ships, can see nothing of the outside world when they are at sea at cruising or battle stations. Many of them are shut down in conditions of considerable discomfort, and all they hear are noises off, and sometimes these noises are not particularly far off either. Under ordinary cruising conditions at sea their minds should be stimulated, and their interest maintained, by regular broadcasts and by the display of bulletins, maps and track charts. In battle a running commentary must be provided whenever possible. Even then all the men cannot be reached, since many are operating under conditions where they are surrounded by considerable noise and activity. Those isolated parties must be remembered in the lulls, and messages, or someone in person, sent to them to tell them of the latest developments. Without this, rumor will be rife; and rumor is a dangerous thing. It either may raise false hopes, or it may even breed fear.

As regards fear, I do not propose to discuss that issue at any length. The extent to which fear, or perhaps one should say cowardice, can be controlled is largely governed by the extent to which personal example can function, and the extent to which the men's general confidence has been obtained. Here and there, of course, there will be a man who has a timid nature, or whose lack of natural moral strength makes him a coward. Watch must be kept for any indications of this sort, and the man who develops an anxiety neurosis must go. His retention on board would be a most infectious liability. Similarly the ship must keep an eye open for signs of undue strain or exhaustion which can lead to neurasthenia, as men with this condition may cause trouble with their subordinates. The main difficulty often is to determine genuine cases of anxiety neurosis, and to bowl out the "act" which can be put on by an ill disposed man purely for the purpose of getting a shift to more congenial and less dangerous duty.

The provision of good welfare arrangements ashore for the families of the men obviously will help to maintain the morale of both. Organization to provide for this is considerable in the British Service, and the men are assured that, when they believe there may be home troubles, tactful investigations can be made at the home and good advice and assistance provided. There is much opportunity also through this link to discourage the families from subjecting their menfolk to moans and complaints which might make them worry; and, I may add, it is certainly undesirable that the family should spend too much time telling the man how they fear for him in this dreadful war. It does no good for a man's morale to be encouraged to feel sorry for himself. Rather he should be encouraged to believe he is doing a man's work without fuss or undue adulation.

The officers, particularly the Chaplain and the Captain, can do much to help their subordinates in regard to their personal domestic worries and fears. The men must know that they can come to them and unburden their souls, and that what they say will be treated entirely confidentially. The Captain can do a great deal to encourage this, and should always be open to the personal approach and ready to give advice. If the men know that their Commanding Officer is, as he generally is, a married man himself, they will listen to his advice, and that advice more often than not will help them.

Before concluding, there is one last point which must not be disregarded. That is the distribution of awards and honors for gallantry or good service. Obviously, the knowledge that the way in which the individuals perform their service will not be overlooked encourages good morale. It is most important that the Commanding Officer should watch this aspect.

Recommendations for honors and awards are not easy to make, but every care must be exercised to avoid forgetting members of the ship whose necessary performances are less spectacular. Decorations for officers and men provide a great fillip not only to the individuals who have got them, but also to the ship as a whole. One important requirement is that the ship as a whole feels that the right men have received them.

To conclude, a great deal throughout the solution of this problem of maintaining and enhancing morale depends upon the Commanding Officer himself. He must at all times demonstrate a full confidence in himself as well as in his men, and this especially applies if things are going wrong. He must strike the balance between harshness and undue softness in maintaining the discipline which is essential to the proper and efficient running of a community like a warship. He must exercise firmness with the delinquents and yet try to wean these offenders from their bad ways. He must make allowance for ignorance, lack of education or a good home influence, and he must recognize that the newcomer often does stupid things out of a sense of nervousness. He must do everything that he can to know the minds of the men whom he commands; and the measure of his success will depend largely upon his personality and powers of leadership.

PRESENT CONCEPTS OF MILITARY SURGERY*

MAJOR GENERAL NORMAN T. KIRK

The Surgeon General of the United States Army

IN THE care of the wounded our surgeons today have established a record that is unparalleled in the history of warfare and is little short of miraculous. The survival rate among our wounded at the present time is higher than it has ever been in any army in any war at any time. This has been achieved through the full use of the most modern developments of medical science, the use of highly effective measures for the resuscitation of the wounded and the control of shock, the early performance of skillful surgery, and an efficiently organized system for the safe and speedy evacuation of the wounded.

It is not enough to think only in terms of saving life. We must think, too, in terms of saving limbs, of getting our soldiers well quickly and soundly, of getting as many back to duty as possible, and of permitting the maximum number to return home to resume a useful place in industry and society. By thinking along these lines, all our responsibilities on the care of the wounded are fulfilled and our objectives may be better appreciated. Designed with these purposes in mind, our plan for the management of the wounded may be divided into three phases, primary or initial, secondary or reparative, and tertiary or reconstructive. The first two are performed overseas and the third is a function of special units in this country. Each phase of treatment is provided by separate units with the personnel and facilities specially designed for these respective purposes.

The primary or initial phase is directed toward saving life and limb and making the patient transportable by applying early and effective resuscitative and surgical measures. These functions are performed by units in the forward area, i.e., the battalion aid stations, the clearing stations and the evacuation hospitals. They are situated from a few thousand yards to a few miles behind the front lines so as to reduce to a minimum the time elapsing between the occurrence of the injury and the institution of therapy. The wounded soldier is given first aid, hemorrhage is arrested, dressing and splints are applied, pain is relieved by morphine, and shock combatted by plasma and whole blood. The treatment of shock is directed first toward rendering the casualty transportable and preserving life until a hospital can be reached, and second toward preparing him to withstand lifesaving surgical procedures. The first is achieved by the use of plasma and the second by the use of plasma and whole blood. The concept that plasma is a complete substitute for whole blood must be revised. They both have their indications. They are both important.

Patients with injuries, such as perforating abdominal wounds and sucking chest wounds, requiring immediate operation in order to save life, are treated in reinforced clearing stations. All others necessitating surgical care and whose conditions permit transportation are sent to the evacuation hospital.

Wound treatment in this initial phase is directed toward the prevention of infection. The operation termed débridement, is performed with the purpose of removing all tissue that is devitalized by the missile. The proper performance of this procedure is one of the most important steps in the treatment of the wounded. Chemotherapy, i.e., the use of sulfonamides and penicillin, is of value in minimizing the gravity of infection; it cannot be regarded as a substitute for good surgery. As emphasized by one of our forward surgeons, chemotherapeutic agents cannot sterilize dead, devitalized or avascular tissues, nor do they prevent the septic decomposition of contaminated blood clot. This can be accomplished only by properly performed débridement. It should be recognized, too, that with chemotherapy, particularly penicillin, the scope of surgery can be extended and results achieved with a far higher goal of perfection. This is a new and important concept that opens great possibilities in wound management which our surgeons will bring back with them from the battlefields. After completion of the débridement, the wound is allowed to remain open, sterile petrolatum gauze dressing is placed gently into the wound, and the part splinted. Primary closure by suture is strictly avoided in order to minimize the occurrence and gravity of infection. Abundant experience has demonstrated the soundness of this principle. By this method of leaving the wounds open at the first stage immediately after operation and closing them at a second stage, as described later, when the danger of infection is past, the objective of good healing and early restoration of function is safely and soundly achieved. In addition to these principles in the surgical management of wounds of the soft parts, there are certain procedures applicable to special types of regional wounds such as those of the head, face, chest and abdomen. These are usually dealt with by special teams of surgeons well trained in the surgery of these special regions. Fracture cases that require longer periods of hospitalization are evacuated to the rear after initial surgery and temporary or transportation splinting, usually with plaster of Paris.

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* Read at the Sixteenth Annual Scientific Assembly of the Society, October 6, 1944.

The secondary or reparative phase in the surgical care of the wounded is perhaps the most important and significant development in military surgery to come out of this war. This phase is concerned with shortening the period of wound healing, early restoration of function and the return of the wounded soldier to duty, and preventing deformity, disability and death in the seriously wounded. It is designed to prevent or cut short wound infection either before it is established or at the time of its inception. This phase in the surgical care of the wounded is usually instituted at the base hospitals.

Healing of wounds of the soft parts is hastened by means of secondary closure either by suture or by skin graft. If the initial wound operation, i.e., the débridement, has been complete, the wound may be closed by suture on or after the fourth day and the part immobilized by a splint or light plaster cast. The proper time for secondary closure by suture is determined by the gross appearance of the wound rather than by bacteriologic studies. Pus, redness, and edema of the wound margins indicate the presence of infection or residual dead tissue and contraindicate wound closure. If these are minimal, moist dressings are employed to "clean up" the wound. Devitalized tissue and retained foreign bodies are best removed by surgical intervention. After a few days secondary closure may then be done. In well over 25,000 wounds of soft parts that have been closed in this manner good healing has occurred in about 95 per cent, and no serious complications have been observed.

The more complicated types of wounds, such as those with extensive muscle damage and bone or joint injury and those with penetration of the viscera, require more elaborate management. The occurrence and dangers of infection in these wounds are greater and it is here that penicillin therapy has been particularly helpful. Penicillin therapy is begun on these patients as early as possible and is maintained through the periods of both initial and subsequent surgery until the danger of infection is past. In this way surgical procedures have been performed that would otherwise not be possible. Of particular importance, too, in these cases is the recognition of the need for correcting secondary anemia from initial blood loss which contributes to chronic infection and protracted wound healing. Many of these cases require extensive corrective surgery. In order to withstand this type of surgery, adequate support by means of whole blood transfusions before, during and after the operation has been found essential.

Bone and joint involvement in wounds of the extremities are among the most important of these complicated injuries because of their relative frequency and the protracted hospitalization and disabilities which they can cause. Considerable attention has, therefore, been devoted to improving the method of managing these cases. The principles of reparative surgery that have been developed recently have pointed away from the closed plaster technic. When cases of compound fracture reach the base hospital, the transportation splints applied in the more forward zone are removed. Surgical revision of the wound is then performed if indicated. This means particularly excision of residual devitalized tissue. Reduction of the fracture is secured and maintained usually by the suspension traction method, using skeletal traction, the Balkan frame, Keller half-ring leg splint with Pierson attachment, and occasionally by internal fixation or some other means, depending upon the individual case and the indications. The wound is then closed by suture. If drainage of the fracture site is necessary, it is achieved by a dependent stab wound. Similar principles may be applied to wounds complicated by joint injury. Open arthrotomy is done with meticulous removal of devitalized cartilage and retained foreign bodies and the joint space closed. Impending or early joint infection which causes further destruction of tissue is thus prevented or aborted. Occasionally, when the joint structure has been irreparably damaged by the initial injury or by established infection, the joint is resected and healing achieved in a position of maximum usefulness.

This concept of reparative surgery has also been applied to wounds complicated by penetration of viscera such as chest and abdominal wounds. In chest wounds, infection of the pleural space with the development of empyema causing prolonged hospitalization and disability has always been a serious complication. By employing the surgical principles indicated above, the incidence and gravity of empyema have been greatly reduced and men are now being returned to duty who under former methods of treatment would have spent months in a hospital. Frank suppuration in post-traumatic empyema is managed by dependent drainage, but if extensive collapse of the lung exists, surgical decortication is instituted using penicillin therapy as an adjunct. Similarly, in massive organizing hemothorax, radical management with evacuation of the clot and decortication of the lung permits rapid expansion of the lung and good healing. This shift of emphasis from pleural complications, that are secondary, to an understanding of pulmonary pathology with efforts directed toward obtaining quick and complete reëxpansion of the lung has proved its effectiveness in returning soldiers to duty and has been one of the significant advances of military surgery in this war.

In the management of abdominal wounds with penetration of the bowel, the procedure of exteriorizing the damaged segment at the time of initial surgery has been lifesaving. When these cases are returned to the base hospital, early repair of exteriorized bowel and closure of intestinal fistulae is instituted. In this way, life is first saved and later complete normal function is restored.

Thus it may be observed that a new and far-reaching concept in the surgical care of the wounded has been developed. It is a concept that has been made possible through a better understanding of wound pathology and infection following trauma. It is a concept that permits the introduction of early reparative surgery directed toward speeding up recovery and hastening normal restoration of function. It is achieved by combining expert surgery with proper preparation of the patient at the proper time, i.e., before infection can gain headway. This has been made possible by the use of whole blood transfusion to correct secondary anemia and penicillin therapy to restrict the boundary of infection.

THE MALARIA PROBLEM*

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MILITARY demobilization will introduce a large number of malaria carriers into the civil population. Some of the new strains will be more virulent than those we now have and will present a more difficult therapeutic problem. The greater relapse rate of Mediterranean and South Pacific strains will make these soldiers more dangerous carriers since they will be more frequently infectible to the mosquito. This does not pose any new problem; it merely accentuates the existing civilian problem. In the next few years, practising physicians in all parts of the country will see an unexpectedly large number of infections, because *Plasmodium falciparum* (estivo-autumnal malaria) may remain in an individual for a year; *P. vivax* (benign tertian) for 2 and a half years; and *P. malariae* (quartan) for 4 to 7 years and occasionally indefinitely.

That a falciparum case should appear to relapse as vivax should occasion no surprise. Both species are prevalent throughout the malarious areas of the world and double infections are common; more common than records show, for it is unusual to see microscopic evidence of two plasmodial species at the same time, since *P. vivax* so overshadows *P. malariae* as to seem to overgrow it, and *P. falciparum* usually masks completely any vivax infection on which it may be superimposed. It is unlikely that we shall see a great many cases with *P. falciparum*, since most relapsing troops will surely show *P. vivax*. As this species dies out, more and more cases of *P. malariae* will be diagnosed and may even give the statistical appearance of a rising rate for quartan.

No physician can be content with a diagnosis merely of malaria. He must insist that the laboratory tell him the species. If it is *P. falciparum* he should request information as to the percentage of red cells invaded. If 2 per cent or over, the infection is serious; if 5 per cent, the patient is in grave danger of immediate death and should be given intravenous medication at once.

Relapses are often more difficult to diagnose than are frank primary attacks. When infection has been long established the patient acquires a partial immunity, which lessens the severity of the clinical manifestations. The characteristic periodic chills, the high fever, and vomiting tend to disappear. They are sometimes replaced by a protean symptomatology which may at times invite careful attention to almost every organ of the body, including the psyche. For these reasons, in cases of illness of doubtful cause the laboratory tests should include the thick film blood examination for malaria if the individual has been in a malarious area. The surgeon, too, must bear in mind that a post operative fever may not be due to sepsis. Hemorrhage, more than altitude, exposure or fatigue, lights up a latent malarial infection.

The impact on public health of the introduction of a large number of new carriers need not be serious if we carry out plans now developing.

When this problem of new carriers was first broached to me, I outlined the plan upon which the U. S. Public Health Service, through its Office of Malaria Control in War Areas,* is now working. It is based on the premise, that, having never restricted civilian carriers, it is neither humanitarian, nor possible, to restrict the movements of restless military carriers, and that, therefore, we must concentrate our efforts against the vector mosquito. To this end, I advocated removing the hazard of malaria transmission in all endemic foci; preparing mobile control units to take care of possible explosive outbreaks; and preventing the creation of new breeding areas of *Anopheles quadrimaculatus*, our malaria mosquito.

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*Read at the Sixteenth Annual Scientific Assembly of the Society, October 5, 1944.

*Referred to later in this paper as M.C.W.A.

Carriers

The most dangerous carrier is the one suffering a clinical relapse, next, one with a parasitemic relapse. Starting with any given number of clinical cases, there is a steady reduction of continuing infections following each relapse. In the military, each known case will be well treated, usually hospitalized, and consequent demobilization so slowed as to afford an observation time covering the period of greatest relapse. These relapses will be re-treated and demobilization again delayed. As a result, comparatively few carriers destined to frequent relapse will originate from the group of known infections. It is possible that troops long under suppressive treatment, if rapidly demobilized, may become the largest source of carriers. Our forces have been recruited from every town and hamlet and it is reasonable to suppose they will return to every part of the United States and carry some malarial infection.

We have often experienced a sudden increase in the number of malaria carriers. Each 7-year upswing of the malaria cycle has trebled or quadrupled the number of infections. Prior to the War, it was apparent, from the summer travel of residents of the South, that malaria carriers annually visited practically all places, including those no longer in the endemic malaria section. In the 15 years just passed, outside the endemic area they were responsible for not over half a dozen malaria epidemics. In each instance, the outbreaks (usually small) were localized in areas adjacent to a new water impoundment, or to an enlargement of an existing impoundment or to the re-creation of an old one, breeding places which had produced a sudden and material rise in the density of the mosquito vector. This focuses our attention sharply on the mosquito, and we should keep it there.

Endemic Foci

Malaria in the North disappeared because of the short transmission season, the elimination of Anopheline breeding areas through agricultural drainage, and the improving economic status, which provided sturdier and well screened homes. It has nearly disappeared from the Pacific slope, partly by the operation of similar factors and partly through the efficient work of large mosquito control districts. The principal endemic area now lies south of Washington and St. Louis and east of San Antonio. Here, malaria left the large cities, quite fortuitously, through municipal drainage and pollution. Purposeful malaria control, stimulated by the U. S. Public Health Service and directed by state and city health departments, removed it from the residential suburbs, towns and larger villages. It was further pushed back by the thousands of miles of drainage ditches dug by the relief workers during the depression. Since the start of the present war, our malarious area has been again reduced by the extensive mosquito control works of the military forces on large, and often rural reservations and of M.C.W.A. in adjacent areas and near war industries. M.C.W.A.'s recent thick film survey indicated that the present infection rate is only a fraction of the 6 per cent found 10 years ago, probably not more than one half of 1 per cent, with highest local rates of 10 per cent.

Since the cyclic rise of 1934 rates have fallen so low that there has been no measurable peak. This is the strategic time to bring the disease under complete control.

The residuum of infection is clumped in apparently permanent foci in certain rural areas of southern valleys, coastal plains, and piedmont sections. In these foci it remains alive because of the easy accessibility of humans, poorly housed, living near extensive breeding places of *Anopheles quadrimaculatus*. These foci may be large during seasons of great biologic activity and quite shrunken in intervening periods of seeming quiescence, yet never inactive.

Each focus can be found by locating the most easily discoverable infections and including adjacent areas where history reveals that malaria transmission occurred within recent years. It is apparent that reducing the transmissibility of malaria in these permanent foci would eliminate them as reservoirs of malaria.

MALARIA CONTROL IN ENDEMIC FOCI

Each endemic focus should be defined and a complete entomologic survey made. Every breeding place should be accurately located and its relative importance established. All prolific *A. quadrimaculatus* breeding places should be drained if possible. In the rest of them anopheline production should be controlled by larvicides for a period long enough to allow all local infections to die out. During such a program it may be expected that much of the temporary work will be made permanent through local expenditures, since that has been the history of M.C.W.A., where nearly two and a quarter million dollars have been so contributed and spent. At the same time, householders must be stimulated to screen and mosquito-proof their homes, since the eventual rise in mosquito density, when larviciding ceases, must be balanced by lessened accessibility of man to the anophelines.

There is another method which should be tried, internal house spraying with a long-lasting insecticide. If this method were practiced in every home, it would result in the death of those mosquitoes which had secured a human blood meal and in this way would prevent the development of the disease in mosquitoes. Experience has shown that internal house spraying is followed by a relative freedom from the irritation of most of the household insects. The human reaction is so favorable that it indicates the possibility that a large-scale demonstration might cause almost all householders to adopt the practice as a habit of life. Such a change in the habit of life in the South, if practiced by all of the people who live in unscreened homes, could of itself effectively control malaria.

I know of no instance, however, where a whole people have, on purpose, changed a habit of life by individually adopting a new habit for the purpose of controlling a disease. Pending the wholesale adoption of internal house spraying we cannot abandon proven methods of malaria control. The primary attack must still be to reduce the hazard of malaria transmission by reducing the density of the malaria vector.

MALARIA CONTROL BY MOBILE UNITS

To handle explosive outbreaks M.C.W.A. has already organized several mobile units which can be dispatched to the affected areas. The unit comprises an entomologist, larviciding crew and truck. The truck is equipped with larvicides, insecticides and apparatus for their distribution. Production of anophelines will be reduced by larviciding prolific breeding areas. Adult mosquitoes in their roosting places will be destroyed by insecticides.

NEW BREEDING PLACES

These activities must be accompanied by a program designed to prevent the creation of new anopheline breeding places. This can be done only by preventing the accidental creation of breeding areas and by requiring anopheline control on impoundments, purposefully established. Power and flood control impoundments are increasing in number, and mosquito control is not practiced on all. This danger can be eliminated only by the passage of regulatory laws where they are absent and by their rigid enforcement everywhere. Unintentional impoundments will be prevented only through changing some other of our very bad habits. Uncontrolled deforestation of watersheds and indiscriminate lumbering of swamps, accompanied by intensive farming, are followed by a predictable series of events. Deforestation and intensive farming permit a too rapid runoff of rain water. The consequent soil erosion and lowering of the water table causes stream silting and trickling dry-season flow with consequent pooling. These unintentional impoundments provide excellent breeding places for the Southeast malaria vector and are changing harmless brooks, ditches, creeks and even rivers into dangerous malaria hazards. Swamp lumbering lets the sunlight on to acid water, again producing ideal breeding places for our principal malaria vector. The malaria control program of the future should be more and more integrated with the conservation, agriculture and flood control programs, all designed to raise the ground water table, prevent silting and increase the summer flow in streams.

These measures are directed against our own anophelines. We must prevent the introduction of new species through expanding air travel. Planes from foreign countries are being disinsecticized but this is not always completely successful. Therefore, airports of entrance are being placed under entomologic surveillance to prevent the establishment of breeding areas of new species.

CONCLUSION

The Public Health Service through its Office of Malaria Control in War Areas and with the coöperation of the State Health Departments hopes to undertake this comprehensive work. Such a program should not only prevent any increase of malaria due to new carriers, but should remove most of the malaria of the South.

Points out proper dishwashing methods not always being used. In the face of evidence that the amount of disease spread in restaurants is increasing, health departments should intensify their efforts to have eating and drinking utensils properly washed, *The Journal of the American Medical Association* for September 30, 1944 advises. *The Journal* says:

"The sanitary procedures of restaurant operation, including the adequacy of the methods of sanitizing eating and drinking utensils, are matters of general concern. Recently mobile laboratory units of the United States Public Health Service have coöperated with state and local health departments in making swab tests of restaurant utensils in numerous communities in different sections of the country. Unpublished reports of this work, according to John Andrews [in a recent issue of *Public Health Reports*] reveal that improvement is needed in dishwashing methods in most, if not all, of the communities visited. This disappointing condition exists in spite of the availability of adequate information on choice of detergents and machine and hand washing technics. The fault is primarily in personnel. Frequently a person doing the dishwashing has not been properly instructed in technic. Good equipment is worthless if improperly operated. Since the outbreak of the war, the problem of maintaining good sanitation in restaurants has obviously become intensified by shortages of manpower, materials, increased customer loads and reduction of health department inspection facilities. In the face of evidence that the amount of disease spread in restaurants is increasing, health departments should intensify their efforts at control. Experience has shown that health authorities achieve the most satisfactory results by education rather than by policing. Properly organized training courses for employees of restaurants will probably prove more effective than any other one measure. As pointed out by Andrews, restaurant sanitation is an important public health activity, and wartime conditions with the probability of long continued overloading of restaurants in many areas gives this problem a special urgency."

THE DYSENTERIES*†

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ONE of the major problems facing the Naval Medical Corps in the Pacific area has been dysentery. In nonmalarious regions it has been the most common disease affecting landing forces, and, as such, measures aimed at preventing or eradicating this condition are of primary interest to both the clinician and sanitarian alike.

For the purpose of this article the term dysentery will be limited to the specific infections caused by either *Endamoeba histolytica* or a member of the genus Shigella. Other causes of diarrheal diseases, e.g., cholera, salmonellosis, food posioning, etc., are not considered.

AMEBIC DYSENTERY

The causative agent, the protozoan parasite, *Endamoeba histolytica*, has a world-wide distribution, but is found much more commonly as one nears the equator. As well as giving rise to acute and chronic dysentery, the disease may exist in subclinical or latent form, causing either the diverse symptoms of amebic colitis without dysentery, or even more frequently a carrier state in which no symptoms referable to the infection may be observed. This latter group of asymptomatic carriers far outnumbers frank cases and hence the general term "Amebiasis" is used to include all cases of infection with the specific organism, regardless of whether symptoms are present or not. The incidence of amebiasis among naval recruits is in the neighborhood of 10 per cent. In the case of men returning from duty in the Pacific the incidence has been found to be as high as 20 per cent in some groups. The majority of these men are asymptomatic carriers, and cases of acute amebic dysentery have been relatively few. The commonest complication, liver abscess, has occurred but rarely.

Endamoeba histolytica is a protozoan parasite belonging to the order Amoebida. Large and small races are recognized, depending upon the average diameter of the cysts (12 and 8 microns respectively); in general, the former are considered more pathogenic. Although the disease may be suspected clinically (a dysentery with blood and mucus characterized by gradual onset with relatively low fever and mild toxemia, the so-called "walking dysentery"), the specific diagnosis can be made only by the demonstration of *Endamoeba histolytica* in the feces of the infected patient. Trophozoites are as a general rule found only in cases of acute or chronic dysentery. They are best demonstrated by normal saline smears and exist typically as giant amebae containing ingested red blood cells. Cysts may be demonstrated from both acute and chronic cases and from carriers, and it is by means of these relatively resistant forms that the disease is spread from person to person. Cysts may be demonstrated by normal saline or aqueous smears. Staining with iodine is often helpful, and the use of fixed preparations stained with iron hematoxylin gives a positive identification. The demonstration of cysts of *Endamoeba histolytica* is the only method of diagnosing the carrier state. Unfortunately, the identification of these cysts is not easy, and prolonged study and experience are required before one can hope to become expert in their recognition and differentiation from other cysts.

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*Read at the Sixteenth Annual Scientific Assembly of the Society, October 6, 1944.

†This article has been released for publication by the Division of Publications of the Bureau of Medicine and Surgery of the United States Navy. The opinions and views set forth in this article are those of the writer and are not to be considered as reflecting the policies of the Navy Department.

If the clinical evidence points toward amebic dysentery, and adequate laboratory facilities and/or trained personnel are wanting, a therapeutic test with emetine hydrochloride is indicated; 0.06 gram of the drug should be administered subcutaneously on 2 successive days. If the dysentery is of amebic origin, a striking response will be noted within 24 hours.

Treatment.—The drugs most frequently used are emetine hydrochloride and various iodine and/or arsenic compounds. In the Navy vioform is the iodine compound of choice, while carbarsone is the arsenic compound of choice. Specific treatment of the various phases of amebiasis may be outlined as follows:

1. For acute and chronic amebic dysentery:
   - (a) Emetine hydrochloride, 0.06 gram, subcutaneously once a day for 5 days.
   - (b) Beginning on the third day of emetine therapy carbarsone, 0.25 gram, by mouth 3 times daily for 7 days.
   - (c) After a rest period of 7 days, vioform, 0.25 gram, by mouth 3 times daily for 7 days.
   - (d) After another rest period of 7 days, carbarsone, 0.25 gram, 3 times daily for 7 days.
2. For amebic colitis without dysentery:
   - (a) Emetine hydrochloride, 0.06 gram, once a day for 3 days, followed by
   - (b) Carbarsone, 0.25 gram, by mouth 3 times daily, for 7 days.
   - (c) After a rest period of 7 days, vioform, 0.25 gram, by mouth 3 times daily for 7 days.
3. For symptomless carriers:
   - (a) Carbarsone, 0.25 gram, by mouth 3 times daily for 7 days.
   - (b) After a rest period of 7 days, vioform, 0.25 gram, by mouth 3 times daily for 7 days.
4. For amebic abscess of the liver and other organs:
   - (a) Emetine hydrochloride subcutaneously, 0.06 gram, daily for 8 days. Careful watch should be kept for evidence of toxicity which may appear after 0.30 gram of the drug has been given. Nausea and vomiting and signs of cardiac damage (rising pulse, falling blood pressure, electrocardiographic changes) are indications for stopping the drug. The smaller abscesses respond well and rarely require surgical intervention, which may be necessary in the case of larger ones. After a rest period of 8 weeks the emetine hydrochloride course may be repeated provided that no toxic manifestations have appeared.
   - (b) The intestinal phase of the infection may be treated with one or more courses of vioform following the first course of emetine. Carbarsone should be avoided because of the existing hepatic damage.

In the use of emetine hydrochloride as a therapeutic agent it must be remembered that this drug affects only the vegetative forms found in the tissues. It exerts no effect on the vegetative and cystic forms present in the lumen of the bowel; hence, if used exclusively, the chance of reinvasion is not precluded.

Prevention.—Since effective methods of immunization and of chemoprophylaxis are not available, the prevention of amebiasis depends on the maintenance of food and water supplies uncontaminated with this parasite. The cysts of *Endamoeba histolytica* are relatively resistant to the action of chlorine; hence water must be sterilized by sand filtration or other methods. Asymptomatic as well as symptomatic carriers of the parasite should be treated as outlined above.

BACILLARY DYSENTERY

Outbreaks of bacillary dysentery have been not infrequent occurrences in the course of landing operations in the Pacific. They are prone to appear a week to 10 days after the initial landing has been made, particularly if the presenting sanitary conditions are bad and military exigencies prevent the prompt erection of flyproof latrines, galleys and mess halls. Since patients convalescing from bacillary dysentery as a rule continue to excrete the organisms for a long time and since symptomless carriers are common, the term "Shigellosis" is used to cover all individuals infected with organisms belonging to the genus Shigella.

Shigellosis is of world-wide distribution, but outbreaks of the clinical disease are met with more frequently in the tropics. It is transmitted through the ingestion of food or drink contaminated with feces from frank cases of dysentery or from asymptomatic carriers of dysentery bacilli. Contamination may be either direct or indirect through the medium of flies, and under circumstances in which the fly population is large and galleys and latrines are not properly screened, this latter method of spread may be the more important one.

Various species of the genus Shigella may cause bacillary dysentery. The more important disease-producing members of this genus are set forth in the accompanying chart.

NAME OF ORGANISM	COMMON DESIGNATION	GENERAL PROPERTIES IN RELATION TO DYSENTERY
Shigella dysenteriae	Shiga bacillus	The cause of a severe form of dysentery found chiefly in the Orient. Cases have been reported in New Guinea and in the Near East, but not often in the U. S. A. Produces a true soluble exotoxin.
Shigella ambigua	Schmitz bacillus	The cause of a relatively mild form of dysentery found commonly in the Orient and rarely elsewhere.
Shigella paradysenteriae (syn: *flexneri*)	The Flexner-Boyd group of organisms of which 14 may be typed serologically.	The cause of a mild or severe dysentery of world wide distribution; apparently the commonest cause of outbreaks in the Armed Forces.
Shigella sonnei	Sonne bacillus	The cause of mild or severe dysentery of world wide distribution; frequently met with in the U. S. A. The high degree of contagiousness is apparently associated with the large number of subclinical infections which act as carriers. Relatively more resistant to chemotherapy than other members of the genus.
Shigella alkalescens	Bact. alkalescens	An infrequent cause of true dysentery. More often it is present in the feces as a mere commensal.

The clinical picture presented by the disease is well known but may be frequently confused with syndromes produced by other enteric pathogens. After a variable incubation period there ensues the characteristic onset of fever and abdominal cramps, soon followed by the passage of loose yellow to greenish watery stools which rapidly become mucopurulent and bloody. Tenesmus is a prominent symptom, and in severe cases dehydration and toxemia are marked. Frequently, however, a dysentery with blood and mucus fails to develop, symptoms being limited to a mild or severe diarrhea with relatively insignificant toxic symptoms. The presence of pus cells in fecal smears suggests a dysentery of bacillary rather than amebic origin.

In recent years important advances in laboratory diagnosis, in specific therapy, and in the prevention of bacillary dysentery have been made.

1. *Laboratory diagnosis.*—The use of the rectal swab as outlined by Hardy and Watt[1] has made it practical to culture large numbers of individuals for the identification of carriers of Shigella in a relatively short time. A small, well lubricated rubber tube containing a cotton tipped applicator is inserted per anum; the tube is withdrawn slightly to permit the operator to bring the tip of the applicator in contact with the rectal mucosa. The tube is then returned to its original position and tube and applicator are removed. The entire surface of a Shigella-Salmonella agar plate is then painted with the applicator. This medium has the property of inhibiting the growth of nonpathogenic organisms such as the coliform bacillus. Suspicious colonies are isolated and picked and carried

through diagnostic fermentation and other biochemical tests. The final identification of the organism is carried out by typing it, using mono-specific typing sera and the slide agglutination test. The introduction of these relatively new procedures has resulted in the saving of many tedious hours, thus enabling the investigator to culture a far larger number of individuals in the same time.

2. *Therapy.*—The development of chemotherapy with the sulfonamides has furnished a specific means of combatting bacillary dysentery. Although the majority of the sulfonamides exert a beneficial effect on the course of the disease, the easily absorbed sulfadiazine is the drug of choice. The initial dose is 2 grams by mouth followed by 1 gram every 6 hours. A minimum period of 5 days of therapy is advisable; following this, the drug may be discontinued when the patient has been asymptomatic for 48 hours, and (if laboratory facilities are available) when 2 successive negative cultures have been obtained. In case the poorly absorbed sulfaguanidine or succinylsulfathiazole is used, the initial dose is 10 grams followed by 5 grams every 6 hours. The criteria for stopping the drug remain the same. Carriers should be treated with sulfadiazine, 1.0 gram, every 8 hours, day and night, for a period not exceeding 2 weeks. If this drug is not available, sulfaguanidine or succinylsulfathiazole may be used in doses of 3.0 grams every 8 hours, day and night, for a period of not over 2 weeks. While the patient is under drug therapy a generous fluid intake should be maintained to insure adequate renal function. The use of enteric-coated tablets is unnecessary.

Chemotherapy has proven particularly valuable in the treatment of infections with *Shigella paradysenteriae*. Less dramatic results have been obtained in cases due to *Shigella sonnei*. Infections due to *Shigella dysenteriae* have responded well to a combination of chemotherapy and specific Shiga antitoxin. A daily dose of 40–50 ml. diluted in 500 ml. of saline and administered very slowly by vein should be given until the toxemia and dysentery abate. The patient must be tested for sensitivity to serum before the antitoxin is administered.

The use of purgation, high enemas and colonic irrigations, bacteriophage, and polyvalent antidysentery serum is not recommended, since proof of the efficacy of these procedures is lacking; and the use of the first two is not without danger to the patient.

3. *Control and Prevention.*—A. Individual measures: The early diagnosis, strict isolation and prompt treatment of the individual patient with bacillary dysentery will do much to prevent the spread of the disease. The room or bed area should be thoroughly screened against flies. Particular attention should be paid to sterilizing the excretions of the patient. The use of 5 per cent cresol or 10 per cent formalin is effective in the sterilization of feces, urine and bath water. Attendants should be gowned and should scrub their hands with soap and water after each contact with the patient. Linen, dishes and other utensils used by the patient should be sterilized by suitable means before being put back into general circulation.

B. General measures: a. The recognition and treatment of mild cases and "carriers" through the medium of rectal swab surveys followed by chemotherapy represents the ideal method of preventing the disease in closed communities under normal conditions. Particular attention should be given to food handlers. Those found to be positive for Shigella should be isolated until their course of therapy is complete and cultural results are negative. The detection, isolation and treatment of the Shigella carrier represents an important means of controlling dysentery. It is often impossible to carry out these measures under field conditions.

b. Sanitary measures similar to those employed for prevention of other enteric infections should be utilized. These include meticulous control of all milk, water and food supplies, proper treatment and disposal of sewage and garbage, and protection of food from flies. During landing operations it may be some time before proper latrines can be dug or messing facilities set up. The men must be instructed to bury their excreta and their empty food containers during this period, so as to reduce opportunities for fly breeding to a minimum, and to deny access to infected feces to what flies may be present. In the field the role of the sanitation officer in preventing dysentery is paramount.

c. Chemoprophylaxis presents a promising method for the control of the disease in the field. The following is from a letter of the National Research Council to the Surgeon General of the Navy: "When the incidence of bacillary dysentery threatens to reach epidemic proportions, all healthy individuals in the community may be given 0.5 gram of sulfadiazine every 12 hours until the threat has disappeared. During such periods all subjects should be cautioned to drink sufficient fluids to maintain a free flow of urine." As yet no reports as to the efficacy of this measure as a prophylactic agent in our Armed Forces are available.

d. Vaccination against bacillary dysentery remains a procedure which cannot be recommended as yet because of the lack of proof as to its value. Investigators working on this important problem have experienced difficulty in evolving a method of detoxifying the vaccine without destroying its antigenicity. Recent work in this field has suggested at least one practical method of overcoming this difficulty, and it is hoped that the resulting vaccine can be granted an adequate field trial in the near future. The immunized individual develops mouse protective antibodies in his serum, but it remains to be determined that these will protect him against subsequent clinical infection. An effective vaccine against dysentery would be as great a boon to the Armed Services in this war as was TAB vaccine in the last.

e. Bacteriophage as a prophylactic agent as well as a therapeutic one continues to be a disappointment. As pointed out by Boyd and Portroy[2] in their recent authoritative article, bacteriophage is singularly ineffective in vivo in spite of its activity in vitro. Its use at this time cannot be recommended.

Summary

The dysenteries of amebic and bacillary origin are considered from the point of view of the medical officer in the field. Certain recently developed procedures in the laboratory diagnosis, the treatment and the prevention of these conditions are discussed.

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Transmission of infantile paralysis. "The method of transmission of the virus of poliomyelitis," *The Journal of the American Medical Association* for October 21, 1944, says in answer to a query, "has not yet been clearly demonstrated. . . . The virus has been found consistently in the alimentary tract and stools of both patients and contacts. While a large body of circumstantial evidence supports the theory of direct contact from patient to patient, there is also the fact that the virus has been recovered repeatedly from flies trapped in epidemic areas. However, the importance of the fly as a vector has not yet been clearly demonstrated. It is not possible in the present state of knowledge to say whether the contamination of the fly with virus is a result of a disease or a causal factor in it. The seasonal incidence of . . . epidemics, combined with the finding of virus in the human alimentary tract, stools, sewage and flies, lends weight to the contention that poliomyelitis is primarily an intestinal disease such as typhoid and dysentery. . . ."

President's Page

THEY, TOO, SERVED

The announcement in the newspapers the other day that the Armed Forces Induction Station at Fort Myer, Virginia, had been discontinued reminded me that the services of doctors at home are too often taken for granted. It would be interesting to know how many citizens in Washington are familiar with the fact that for about three years a number of the outstanding physicians in this community have given most generously of their time and services to the Government.

Back in January 1942, Dr. F. X. McGovern, then Chairman of the Society's Committee on Military Affairs, was called upon by the United States Army to provide physicians to examine selectees at Fort Myer. With his customary thoroughness, Dr. McGovern set up a sound and efficient organization. He chose "captains" in each specialty and charged them with the responsibility of seeing to it that there were four physicians in their field on hand every day except Sunday to make the necessary examinations. It is of interest to note that there has been no change in "captains," and that in a majority of instances the examining physicians have been most faithful in the performance of their duties. Due notice of this was taken by Colonel Charles E. Rayer, Commanding Officer at the Station, who recently wrote a letter of commendation to each examiner.

It should be mentioned also that before we entered the war, the Medical Society was called upon to help with the organization of medical examining teams which conducted the examinations of selectees for local draft boards in the various hospitals. This was a tremendous task and was carried on for many months until there was a change in the examination procedure and these teams were eliminated.

So when the record of this war is written, it is to be hoped that these physicians will not have been forgotten. For they, too, served.

Editorials

THE FUTURE OF THE ASSEMBLY

The Society has had six years' experience with the ANNUAL SCIENTIFIC ASSEMBLY outside its own building. Until 1938 the ASSEMBLY had been held at the Medical Society's headquarters. In 1939 it was transferred to the Mayflower Hotel where there was much more space and better facilities for this type of meeting.

The Committee on Arrangements in 1939 was naturally somewhat reluctant to sponsor too ambitious a program. The scientific meetings were held in the moderately sized East Room and exhibits were on display in the Pan American Room and the 17th Street Parlor, both comparatively small rooms. However, the first meeting was a huge success financially and otherwise, so in the succeeding years the entire wing of the Mayflower, including the Grand Ballroom, has been used.

Attendance during the intervening years has increased from about one thousand to twice that number. This is tangible evidence that members of the Society appreciate the opportunity of hearing the ablest physicians in this country who have always been glad to appear on the ASSEMBLY program and to view excellent exhibits, many of which cannot be duplicated elsewhere. Nearly half the physicians in attendance in the past two years have been medical officers and doctors from nearby states. Hotel reservations this year were made by physicians from Maryland, Virginia, Delaware, New Jersey and Pennsylvania.

Each year some 6,000 preliminary programs have been mailed to physicians in Washington and nearby states. The result has been that the ASSEMBLY is becoming better known to all physicians within a 150-mile radius of Washington. As time goes on, more and more of them will come to the ASSEMBLY, primarily because of the splendid programs offered and the fact that doctors like other people enjoy a visit to the Nation's Capital. After the war, greater emphasis will be placed on social activities which will attract not only physicians but their families as well.

The desirability of the ASSEMBLY's being jointly sponsored by the medical societies of Maryland and Virginia and the District of Columbia has been suggested. So far as is known, this suggestion has not been discussed by any of these groups officially or otherwise. However, there are possibilities in such an arrangement worth considering. Certainly it would make possible a meeting comparable in size and quality to those of national medical organizations. Meetings could be alternated between Richmond, Baltimore and Washington. Whether or not this would prove feasible or desirable will have to be determined by future Committees on Arrangements in conference with officials of the other medical societies, provided, of course, the idea appeals to them. Even though nothing comes of this suggestion, there is no reason why the ASSEMBLY should not become the outstanding scientific meeting on the Eastern seaboard.

Except for space limitations, facilities provided the ASSEMBLY at the Mayflower Hotel are ideal. When the East Room, which during the war serves as a dining room, is again obtainable, space for scientific exhibits will be ample. The Grand Ballroom can not, of course, be improved upon for scientific sessions. No state meeting has a better arrangement to offer commercial exhibitors. However, the space available for this purpose is far short of what is needed to meet the demand. But until Washington acquires an auditorium suitable for conventions, the Society cannot improve upon accommodations at the Mayflower sufficiently to warrant a change.

SULFONAMIDE PROPHYLAXIS OF STREPTOCOCCAL INFECTION

In an editorial[1] published in the ANNALS of September, 1943, attention was directed to the accelerating effect of the war on the progress of medical research. In the field of infectious diseases in particular, unique opportunities for controlled investigations have been afforded. It is obvious from the material already published that the medical personnel of the military forces have been thoroughly aware of this fact. Among the most interesting studies on infectious diseases are those relating to the use of sulfonamides for the prevention of bacterial infections. To date there is adequate reason to believe that the sulfonamides are useful in the prophylaxis of gonococcal infections, meningococcal infections, bacillary dysentery, and streptococcal infections. In all but the streptococcal infections, the prophylactic administration of one of the sulfonamides is necessary for only a short period of time. In the case of streptococcal infections, however, a program of prevention often must cover a longer period of time and is correspondingly more complex.

The idea of using sulfonamides for the prevention of streptococcal infections first became popular in connection with the problem of recurrent rheumatic fever. It has long been known that a patient who has had one attack of rheumatic infection is peculiarly susceptible to recurrences of the disease. The statistical studies recently reported by Wilson and Lubschez[2] emphasize this fact and show that the risk of recurrence of rheumatic fever is greatest during the year immediately following an attack and especially in younger patients. In addition, the serious effects, both immediate and remote, of this disease and the tendency of these effects to be aggravated disproportionately by each succeeding episode of activity of rheumatic infection increase the importance of preventing such recurrences. Of the various prophylactic measures tried, continuous, long-term administration of sulfanilamide (or sulfadiazine) following an episode of activity is most promising. This method, of course, is logically directed toward the prevention of hemolytic streptococcal infections, which are generally conceded to be the precursors of rheumatic fever. The success of this method is attested by numerous reports based on experiences obtained in civilian practice. Thomas[3] has quite recently reviewed the subject and points out that the incidence of recrudescences of rheumatic fever is less than 1 per cent in patients receiving prophylactic sulfanilamide, compared to an incidence ranging from 10 to 35 per cent in control groups.

All respiratory infections and streptococcal infections in particular constitute a liability of tremendous magnitude to the armed services. In recognition of this fact, programs were started last winter with a view to preventing such infections. Preliminary reports by Holbrook[4] and by Coburn[5] on the use of sulfadiazine for this purpose have now been published. In both studies the drug was administered in a dose of 1 gram daily for long periods of time. Holbrook reported a 50 to 75 per cent reduction in the incidence of respiratory diseases and streptococcal infections and found also that the reduction in rheumatic fever paralleled that of streptococcal diseases. Coburn concluded that the continuous administration of 1 gram of sulfadiazine daily is adequate to check a well advanced streptococcal epidemic, to check a streptococcal outbreak at its onset, and to protect 85 per cent of susceptible persons from implantation with bacterial respiratory pathogens. He also noted that the incidence of rheumatic fever diminished correspondingly. In addition, he pointed out that short courses of sulfadiazine prophylaxis are not effective in checking an outbreak of streptococcal infections.

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[1] Editorial: Med. Ann. Dist. Col., 1943, **12**, 361.

[2] Wilson, May G., and Lubschez, Rose: J. A. M. A., 1944, **126**, 477.

[3] Thomas, Caroline B.: J.A.M.A., 1944, **126**, 490.

[4] Holbrook, W. P.: Ibid., 1944, **126**, 84.

[5] Coburn, A. F.: Ibid., 1944, **126**, 88.

While the programs just discussed were directed mainly against streptococcal infections, they effected a remarkable decline in the incidence of other types of infection as well, including meningococcal meningitis and pneumococcal infections. Even "catarrhal fever" became less prevalent. This does not mean that continuous administration of sulfadiazine will necessarily reduce the incidence of virus infections, including the common cold, but implies that many "grippal" illnesses may actually be of streptococcal origin. However, in the case of the common cold, sulfadiazine prophylaxis may be expected to curtail the number of complications.[6, 7]

Evaluation of the reports of efforts to prevent streptococcal infections and related rheumatic fever by means of continuous, long-term administration of sulfonamides cannot be made fully at this time. There seems to be no doubt that the method is highly effective in preventing recurrences of rheumatic fever. In the case of this disease the risk of recurrence of the disease probably outweighs any theoretical risk of the program of prophylaxis. In the case of streptococcal infections in general, a number of questions have arisen and cannot be completely answered at present.

What are the dangers of toxic reactions? Coburn's experience in this respect is of greatest interest. A small percentage of the 250,000 persons involved in his study manifested an idiosyncrasy to sulfadiazine. Evanescent rashes of minor significance occurred in 0.5 per cent of cases. Dangerous constitutional disturbances (exfoliative dermatitis and granulocytopenia) occurred in only 0.01 per cent.

What is the likelihood that patients will become sensitized to the sulfonamide? This bugaboo has restrained many physicians from using sulfonamides even for the treatment of some of the minor streptococcal infections, like acute tonsillitis, because of the fear that sensitization would result and might interfere with the use of the drugs later in life in case of greater need. The collected findings suggest that this is not an important danger. A small percentage of persons have an idiosyncracy to sulfonamide compounds, but sulfonamide prophylaxis per se has not shown a tendency to sensitize. It may be, however, that further trial will modify this evaluation.

What is the hazard of development of drug fastness by pathogenic bacteria? Only time will give a full answer to this question. The experience to date has indicated no tendency of the respiratory pathogens to become resistant to sulfonamides as a result of sulfonamide prophylaxis.

Is mass prophylaxis the most efficient method for dealing with streptococcal infections? The answer to this question must await further trial of the method. However, Jones[8] has suggested that it may be possible to use sulfonamide prophylaxis discriminately, perhaps reserving the procedure for individuals who show real need for it. Methods for deciding about such need are not yet developed.

Finally, there is a question for which there is not even a partial answer at the moment. However, the answer to this question, when it is

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[6] Cecil, R. L., Plummer, N., and Smillie, W. G.: J.A.M.A. 1944, 124, 8.

[7] Faust, F. B., and Simmons, J. M.: Ibid., 1944, 125, 552.

[8] Jones, T. D.: J.A.M.A., 1944, 126, 92.

finally evolved, may well be of momentous importance to the public health. Furthermore, it would seem that the reports cited give us the privilege of asking the question if for no other purpose than to stimulate the imagination. Is the day in sight when we may expect to eradicate streptococcal disease?

H. H. H.

HEALTH SECURITY ADMINISTRATION—HOW IT FUNCTIONS

Doctors are aware of the extent to which they give their professional services in their own practices and on the wards of hospitals. Few realize, however, that there is an agency in Washington which effectively safeguards their generosity against exploitation.

It is almost three years since the work of this organization was described at a Medical Society meeting by representatives of the Community Chest. Officials and board members of all the hospitals were present at this meeting by invitation. Since then, there has been no advertising and little publicity of this organization's activities. However, in the face of a vastly increased population and a shortage of doctors, the proportion of the population requiring free medical care has steadily been reduced.

Health Security Administration is a non-profit corporation whose membership includes equal representation from the medical profession, the hospitals, and the Community Chest or the public-at-large. Devoted to the purpose of arranging hospitalization and clinic care for all who are in need, it conserves the funds allocated by community chests and other charitable organizations by medical-social certification of persons whole illness coincides with financial instability.

Taxation has dried up the sources of endowments on which hospitals used to depend to prevent the insolvency so likely to face a voluntary institution, costly to operate, but which cannot fail to provide good care for all who come as patients to its doors.

HSA is a centralized social admitting bureau which, on reference by hospitals, by physicians or by others, arranges hospitalization or clinic care for persons of limited income within their ability to pay. It maintains a staff of medical-social counselors who, on the basis of medical opinion, arrange admissions to hospitals. It provides a plan by which the patient, or party responsible, can make partial reimbursement over a period of time to the pooled resources of the fund-raising agencies. The hospitals, however, are paid monthly, in full, at minimum rates which are the subject of an agreement between HSA, the Community Chest and each hospital. These rates are less than cost to the hospitals and provide no payment whatever for so-called "extras." It is gratifying to know that the collections from patients are sufficient this year, for the first time, to make possible an increase in these rates to a figure more nearly but still below the actual cost to the hospitals. This fact, it should be noted, in no way lessens the need for increased contributions to the Community War Fund from which the several community chests derive the money which they allocate for hospitalization. The expenses of HSA are incurred not only in the certification of patients for whom charitable funds are disbursed, but for the counseling of many individuals who are thereby helped to plan their own finances so that they can pay the regular rates for hospitalization as well as doctors' fees.

HSA is well equipped to serve the hospitals as well as the physicians but both must be willing to coöperate by prompt reporting and otherwise to use the facilities which are available. All admissions and discharges of HSA patients are recorded in the central office by telautographs installed in each hospital. Direct telephone lines are maintained between HSA and most of the hospitals as well as with the MEDICAL BUREAU, and all in-patients are cleared as to social case history with the Social Service Exchange by teletype. Non-D. C. residents are cleared with the County Departments of Public Welfare as well as with private social agencies in nearby counties of Virginia and Maryland.

HSA is administered under a Board of Trustees representative of the medical and dental professions, the hospitals and the public-at-large, and its operating expense budget is under the control of nine members—three of whom are designated by the hospitals and three by the Community Chest. Its accounts are audited monthly and all of its collections from patients are pooled with the money contributed by the public and allocated to its Hospitalization Fund.

HSA also administers a number of special purpose funds entrusted to it by the Service Guild and other organizations or individuals.

It is to the interest of physicians that this organization has developed an effective system whereby the gift of their services can be limited to those who are deserving, charitable funds are conserved and made to benefit the largest possible number of needy patients, and the hospitals' losses on charity service can be so minimized.

Doctors, hospital officials and board members, and others interested in public health, should be acquainted with Health Security Administration.

H. C. MACATEE, M.D.

SPEED VICTORY!

The war is taking a huge toll of American lives on far-flung battle fronts. America, peaceful at home, is in the throes of devastating war abroad whether it fully realizes it or not.

True, the tide is turning but there is still no assurance of early victory. In response to Hitler's orders the Germans are pledged to a vicious last ditch defense. A bitter and costly winter campaign faces our troops and in the offing is the war against Japan, still in the preliminary stage.

Physicians of Washington have done nobly in the matter of War Bond purchases in campaigns of the past. They have met the challenge. Since the very outset of hostilities the American answer to the forces of evil and darkness has been a phenomenal massing of industrial power and military might. All this was done with dollars. Your dollars! And the dollars of other true Americans like you.

The Sixth War Loan, perhaps the most crucial of the war, opens November 20. The medical profession is faced with another million dollar quota. The per capita quota stipulated by the U. S. Treasury calls for at least one extra $100 bond over and above all regular purchases.

A member of the Medical Society will call at your office sometime during the period November 20 to December 16 for the purpose of personal solicitation. This solicitor, a doctor, is a busy individual, even as you are, in these war days. He has his own office routine to follow, just as you do, but to hasten the return of normal, pastoral living he's sacrificing some of his precious time for the greater cause—the cause of freedom. And we are confident that you will extend the courtesies of your home or office so that, with your help, he can record your War Bond purchases for the Sixth War Loan drive. SPEED VICTORY!

THE MEDICAL DIVISION OF THE DISTRICT
WAR FINANCE COMMITTEE

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In and Out of Focus

BY THE OBSERVER

Start (
ing Soldier!
ARMY

Exhibits at the Sixteenth Annual Scientific Assembly

Behind the Scenes at the Assembly

Looking behind the scenes of the 16th Annual Scientific Assembly one discovers that many individuals were responsible for what was by any standard a splendid meeting.

As is always the case, responsibilities rested heaviest upon the General Chairman of the Committee on Arrangements, Dr. Arnold McNitt. Dr. McNitt is a very conscientious man and not immune to worry. As the opening day of the Assembly approached, he was very much like a mariner scanning the sky for storm clouds. Would the threatened strike of Mayflower employees be settled before the meeting or would months of effort devoted to preparations for the Assembly and considerable money be wasted? Would the hotel be able to cope with another wartime meeting? Would there be a good attendance, doctors being as busy as they are? Would all the speakers appear, according to schedule? Would the public meeting, which is always a headache, be well attended? These and many other questions plagued Dr. McNitt as they have all previous General Chairmen.

Fortunately, things went first-rate for Dr. McNitt and his co-workers. There were rough spots, of course, but these were not too bad. Number one headache was the illness of the speaker secured for the public meeting. His inability to appear was not known until midnight preceding the evening he was to speak. Consequently there was a scramble into the early hours of the morning to obtain a substitute. There was great relief when Dr. Foster Kennedy of New York agreed to come to Washington on such short notice.

The only purpose in recounting this experience is to show that the job of General Chairman is no sinecure. Naturally, it is music to his ears when those who attend say that the program and the exhibits are excellent. He knows there are defects, is honestly pleased to receive constructive criticism, but longs to hear that the "show" is good.

Now it would be unfair to give the impression that the success of the Assembly is due entirely to the efforts of the General Chairman. He would be the first to protest such assumption. For the various chairmen and members of subcommittees must do their jobs well if the Assembly is to "click." And they have carried on splendidly.

Attendance was all that one could wish for, the high point being reached during the presentation of the Panel Discussion on Chemotherapeutic Drugs. As was expected, there was also a large audience for the Panel Discussion on the Future of Medicine. This feature attracted attention throughout the country, many requests being received for reprints of the talks given.

Social events this year were, of necessity, few, but those that were held, such as luncheons, were excellently attended.

Some have marvelled at the Society's ability to put on this year's ASSEMBLY which, except for the emphasis on rehabilitation and military medicine, might have been a peacetime meeting. Well, sound leadership and good teamwork did it.

★

Favors Compulsory Health Insurance

The announcement that the Governing Council of the American Public Health Association had adopted a report favoring a Federal plan of compulsory health insurance came as no great surprise.

According to the *New York Times*, the Association agreed upon the following eight-point program:

"1. A national plan to provide comprehensive service for all the people in all areas of the country. The service should include hospital care, the services of physicians (general practitioners and specialists), supplementary laboratory and diagnostic services, nursing care, essential dental services, and prescribed medicines and appliances. While this goal cannot be attained at once, 'it should be attained within ten years.'

"2. These services 'should be adequately and securely financed through social insurance supplemented by general taxation, or by general taxation alone.' The services should be financed on a nation-wide basis, in accordance with ability to pay, with Federal and State participation, and under conditions which will permit the Federal Government to equalize the burdens of cost among the States.

"3. 'A single responsible agency is a fundamental requisite to effective administration at all levels—Federal, State and local. The public health agencies—Federal, State and local—should carry major responsibilities in administering the health services of the future.'

"4. A program should be developed for the construction of needed hospitals, health centers and related facilities, including modernization and expansion of existing structures. The United States Public Health Service should administer the construction program at the Federal level.

"5. The activities of the multiple national, State and local health agencies should be coördinated with the services provided by a national program. 'There is no functional or administrative justification for dividing human beings or illnesses into many categories to be dealt with by numerous independent administrations.'

"6. Financial provision should be made to assist qualified professional and technical personnel in obtaining postgraduate education and training. Professional and financial stimuli should be devised to encourage physicians, dentists, nurses and others to practice in rural areas. Plans to encourage the rational distribution of personnel, especially physicians, should be developed as quickly as possible, 'in view of the coming demobilization in the armed forces.'

"7. Education and training of administrative personnel should be encouraged, financially and technically, especially for those who may serve as administrators of the medical-care program, for hospital and health center administrators and for nursing supervisors.

"8. Increased funds should be made available to the United States Public Health Service, to other agencies of Government (Federal, State and local) and for grants-in-aid to non-profit institutions for basic laboratory and clinical research and for administrative studies and demonstrations designed to improve the quality and lessen the cost of services."

The *Journal of the American Medical Association* for October 14 declares that the adoption of the above program indicates the attitude that may be expected of those committed to Federal control of all matters in the health field.

The *Journal* reviews the action taken by the Council, stating that a report first prepared by a subcommittee was approved after several amendments by the American Public Health Association's Committee on Administrative Practice. It was proposed in this report that medical service would be supported by social insurance, supplemented by general taxation, or by general taxation alone.

Those who opposed the recommendations contained in the report stated "(a) that the administration of public health in the United States was by no means so universal or so generally adequate that public health departments in general were ready for this step, (b) that before the association placed itself publicly on record in the terms of this report there should be consultation with the most interested professional groups, particularly the American Medical Association and the American Dental Association, and (c) that the publication of the subcommittee report, its approval by the Committee on Administrative Practice and the call for adoption in the Governing Council occurred within less than thirty days elapsed time, although the subcommittee had been working on the report for a year."

"The motion to adopt the report," the *Journal* states, "was made at the October 2 meeting of the Governing Council and was extensively debated at that time." Action was postponed until the October 4 meeting. An amendment was then offered calling upon the Governing Council to receive this portion of the report of the Committee on Administrative Practice and refer it to the Executive Board of the American Public Health Association with instructions to confer with the Board of Trustees of the American Medical Association and the American Dental Association in an attempt to arrive at an agreement with these professional groups. The amendment was lost and the Governing Council adopted the report.

Those in opposition to the adoption of the report were Drs. Walter A. Bierring, Past President of the American Medical Association, Haven Emerson and W. W. Bauer.

The *Journal* points out that the Governing Council consists of approximately 100 members, of whom 30 are elected by vote of the Fellows of the American Public Health Association, ten each year for three-year terms, and that the remainder of the Council hold membership by virtue of being section officers or representatives of affiliated (mostly state) public health associations. Because members of the Association, other than Fellows, can vote only on section affairs, the *Journal* charges that the Council's action was undemocratic.

"Here is not a democratic practice in action," the *Journal* states, "here is a shrewdly manipulated performance by full time public officials, economists, bureaucrats. Most of the names of those on the subcommittee are those of men long committed to Federal compulsory sickness insurance and to Federal control of all matters in the health field.

> "The American Public Health Association has an obvious right to express itself on any subject related to the public health. The rejection by the majority group of the proposal for consultation with medical and dental leaders indicates the attitude that may be expected of them if they should have control of the Washington bureaucracy that would dominate American medicine should their ideas become effective. Perhaps this step in which these men had leadership will be useful in serving notice once more on the medical, dental, nursing, pharmaceutical and other professional groups as to the nature of the political manipulators in the fields of social security and public health whom the medical professions will be forced to combat."

★

The Tired Patient

One might describe Dr. Walter C. Alvarez of the Mayo Clinic as "the family doctor to physicians." For a number of years he has gone up and down the country talking in his homely manner to medical societies about functional disorders. His understanding of human beings and his sympathetic but common sense approach to their frailties have been an inspiration to all physicians who have had the good fortune of hearing him.

Last May he addressed the West Virginia State Medical Association on the subject, "What Is the Matter with the Patient Who Is Always Tired?" Dr. Alvarez was right in his element in discussing this subject.

> "Every day I see tired persons who have been through several overhaulings and have been told that the cause of their troubles has been found in a dropped stomach, or a spastic colon, or gastritis, but usually these diagnoses have failed to help the situation and they look to me like placebos. Sometimes, of course, we physicians find something that is definitely wrong, like amebas in the stool, but even then we will not have uncovered the 'cause,' as shown by the fact that after the parasites are all killed with drugs the patient goes on just as miserable

as he or she was before. As I say, the amebas were parasites and it was good to get rid of them, but they were doing the patient about as much harm as so many fleas. There were not enough of them, and they were not causing the symptoms complained of.

"Often we explore the abdomen and take out an appendix, or maybe a gallbladder that empties a little slowly; we take out teeth and tonsils, we give a lot of 'shots,' and what happens? The patient goes to another clinic and gets overhauled all over again. She pays another good-sized fee, she gets another placebo of diagnosis, and she has some treatment for this. Later she goes to another clinic and all is done over again, regardless of the fact that most of these persons can ill afford the great expense, and most physicians can ill afford to waste the time. With the best of intentions, we of the medical profession are evidently giving many of our tired patients a raw deal; we are not giving them much for their money, and worse yet, too often in our desperate efforts to help them, we hurt them. Whenever we perform a futile operation on some nervous, frail little woman, who can ill afford to pay even the hospital expenses, we have not practiced good medicine."

Coming down to the cases on the characteristics of fatigue of psychiatric origin, Dr. Alvarez says, "Often one can tell right off that a person's fatigue is due purely to a nervous inheritance. Characteristically, this type of distress is present in the morning; the patient wakes with it and it wears off gradually in the late afternoon. Particularly when a person has a neurotic ancestry, there may be days when he will wake feeling so depressed and miserable that he will wonder how he can find strength to get up and face the day. About three or four o'clock in the afternoon he will begin to feel better, and about ten o'clock at night he may feel like 'going places.' Obviously, such fatigue is not due to a hard day's work. If it were, it would most likely come at night and would not be such a bruising and punishing type of fatigue. Significant is the fact that in many instances the woman with the terrible type of morning fatigue has no work to make her tired. . .

"Many of the tired people I see each day are constitutionally inadequate. I think they will always be somewhat frail and sickly. They cannot be made over. When they say to me, 'Surely there must be some way in which I can be cured,' I reply, 'Yes, but the only way I know of would be to begin with a different set of grandparents.'

"Some doctors say, 'Do you mean to tell me that you tell patients that they are hopelessly inadequate? Isn't that terribly discouraging?'

"Yes, but often I soften the blow and get them to see what I mean by admitting that to some extent I, too, am constitutionally inadequate. I could not earn my living as a prize fighter or a wrestler. I found once that I could not even stand the long hours and loss of sleep that a busy general practitioner has to endure day after day. I tried it, and found that I could not 'stand the gaff'; I had to become an internist who could go home at 5:30. I do not tell these people that they must be a failure in life; what I ask is that they do as I did, and try to find a job within their means of strength. I ask also that they learn to hoard their energies and not to fritter them away on emotional debauches, as so many people do. . . .

"Let us physicians not be so determined always to find an organic cause in the abdomen or thorax for a patient's sense of fatigue. Let us look for it oftenest in a tired brain or in a brain handicapped by poor nervous heredity. Let us constantly be on the watch for the symptoms of a nervous breakdown, and when such a break is recognized, let us find out why it came."

★

The Health Diary

According to the *New York Times*, Dr. H. E. Robertson of the Mayo Foundation of the University of Minnesota wants people to keep diaries for the purpose of noting their pains and aches. "Every individual who consults a doctor," Dr. Robertson is quoted as saying, "presents blank spaces in his health history which, if they could be filled in, would be of inestimable value in the diagnosis as well as treatment of the illness at hand."

The *Times* makes the point that such a diary will be of no value unless the patient's doctor has access to it. And then, what happens to his privacy? Doctors already know too much for the patient's own good and if they come to know everything, "half the population will have to avert their eyes when they see the doctor approaching on the sidewalk."

The *Times* then suggests that the health diary might be kept in the following manner:

"DEAR DIARY: I sure got up feeling lousy this morning. I was coughing pretty bad, and it was not until about the third cigarette that I could get it stopped. I wonder what that dull pain is in the middle of my back when I first get out of bed? As soon as I could pry my left eye open I noticed that the right one seemed somewhat off-color, so I mixed some boric acid and tried the eyecup, but it didn't seem to help much. It was about noon, I guess, before I seemed to get the right focus. These drugs you get nowadays don't seem to be up to pre-war strength.

"My wife says to me, 'What makes your hand shake so when you're drinking your orange juice, Henry?' I told her she must be seeing things; it couldn't have been shaking, because I was steadying it with my other hand. Otherwise how would I get it to my mouth?

"I must ask the doctor sometime what that murmur is that I hear when I'm rounding the bend on that last block, walking to the station. You don't suppose that's my heart, that loud, do you, diary?

"I don't seem to have much appetite at lunch any more, somehow. And about 3:30 I get the funniest all-tired-out feeling, fluttery-like, with a kind of heavy ache in the region of the stomach. Maybe I ought to call up the doctor and ask him if I need a little tonic."

The *Times* concludes with the observation,

> "One can foresee, under the diary system, a complete change in the present method of diagnosing disease. In the early stages it will not even be desirable for the ailing patient to appear at the doctor's office. He will merely call up on the phone and say, 'Doctor, be on the lookout for a gray truck. I'm sending my diaries along. Let me know when you've had a chance to skim through them, and I'll drop in.'
>
> "The chances are good that many a patient won't even have to go to the office to have his tongue looked at. The doctor will merely return the book with a note saying (as he always does anyway): 'You've reached the age where you'll have to take things a little easier; you're not so young as you once were, you know, and you'd better cut down to two cocktails before dinner and two packs a day.'
>
> "The more we think about Dr. Robertson's idea, the better we like it."

★

Malpractice Coverage Clarified

Not long ago, the Medical Society's Executive Board received an inquiry from a member who wished to know whether the Society's group liability insurance with the United States Fidelity and Guaranty Company protected participating physicians licensed in the District of Columbia when they render service to their patients in nearby Maryland and Virginia. Many Washington physicians are not licensed in these states although some have borderline permits granted by the State Board of Medical Examiners of Maryland. There is no provision for such permits in Virginia.

Upon receipt of this letter, the Secretary of the Society communicated with the United States Fidelity and Guaranty Company. He inquired if a policy holder would be covered in the event of a malpractice suit if he were not licensed in the state where the services were performed. A. H. Baker and Company, Inc., general agents for the U.S.F. & G. in Washington, replied as follows:

> "Regarding your recent inquiry as to whether or not coverage would be afforded members of the District of Columbia Medical Society who carry professional liability contracts with the United States Fidelity and Guaranty Company while they are practicing in jurisdictions other than the District of Columbia, we are pleased to advise that our contract gives complete coverage in these cases.
>
> "The exclusion referring to violations of the law under the contract actually refers to specific violations of the law in the practice of medicine and not to a State regulation regarding whether or not the physician is properly licensed in the jurisdiction in which the incident took place. This has been verified with our Home Office and you can assure the members of the Society that our contract will give them complete protection regardless of the jurisdiction in which they are practicing at the time a claim may be made against them."

★

A Plea for Brevity

One would think there would be little time for fruitless and windy discussion in such trying times as these. But it takes more than a war to stop some people from talking. They go on interminably, boring their listeners to distraction. In their hands, the telephone becomes an instrument of torture, for once they get their victim on the line, nothing short of an insult will terminate the monologue.

Your Observer has a personal friend who was addicted to lengthy, rather one-sided conversations. One could not come near him without being literally "talked under the table." The extraordinary happened in this case when he sought some advice in regard to a personal matter. An opportunity was afforded of speaking to him about the effect of his loquaciousness on those who were forced to listen to him. Fortunately, he accepted the criticism gracefully, thereby not only improving his standing in the community but also with many friends who liked him except for this failing.

Windiness is not confined to private conversation. In fact, great talkers never "miss a trick" wherever they may be. And meetings of any kind offer them the opportunities they cannot resist. The *New York State Journal of Medicine* comments on this subject in its October 1 issue under the caption, "Make It Brief." The *Journal* says:

> "Can something be done further to ease the accumulating burden on those physicians who serve the people and the medical societies gratuitously on the numerous committees of organized medicine? We think it can. Many of the meetings are too long-drawn-out.
>
> "True, something has been done to cut the number of meetings to a minimum, but we contend that in many instances they are still too long-drawn-out. Freedom of speech can be lost through abuse of the right as well as in other ways possibly less painful.
>
> "Agenda of meetings might frequently be cut with much benefit in conservation of busy physicians' time. Discussions might often be briefer with no loss to the subject under consideration. Presiding officers, by holding speakers and discussants strictly to the point, could be a great help.
>
> "Many of our meeting habits have been acquired in former times when leisure was more than a word in the dictionary. Those times will doubtless return one day. But, in the meantime, make it brief.
>
> "The less you say today, the less you may have to take back tomorrow."

How true!

★

Booth Controversy Revived

The 336th meeting of the Columbia Historical Society scheduled at the Mayflower Hotel on October 24 serves to remind us that many people believe what they want to believe regardless of the facts. Literally hundreds of books have been written about the death of J. Wilkes Booth, many of them in an effort to prove the inaccuracy of the generally accepted version.

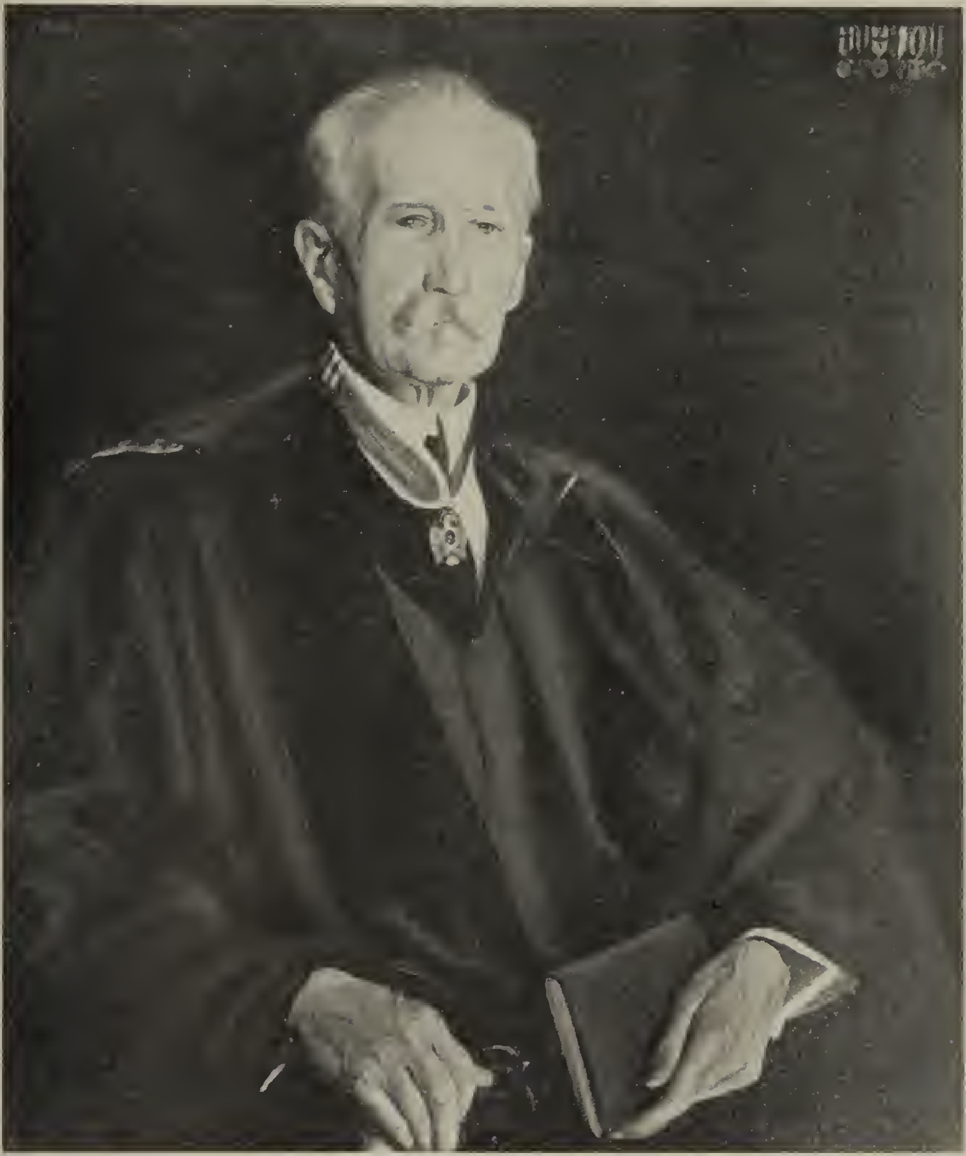
The late Dr. Francis R. Hagner made a thorough investigation of all aspects of this famous case. In pursuit of evidence, Dr. Hagner personally went over the route Booth took in his escape and photographed many of the historic spots along the way. These photographs he had made into slides to be shown in connection with his lecture on this subject. His dissertation usually lasted two hours but there was seldom any letdown in the interest of his audience.

At the time this is written, the Columbia Historical Society meeting has not been held. However, your Observer, along with many others, is looking forward to hearing what the speakers will have to say.

The general subject is to be: "Was J. Wilkes Booth's Corpse Identified?" Dr. John Clagett Proctor, feature writer for the *Evening Star*, who has long been interested in the history of Washington, will speak on "Early Physicians of the District of Columbia with Special Reference to the Identification of the Corpse." William E. Leahy, well known Washington lawyer and counsel for the American Medical Association and the Medical Society of the District of Columbia during the recent trial, will present an "Analysis of the Evidence in the Surratt Trials." Finally Dr. John B. Nichols, Chairman of the Medical Society's Committee on History, will speak on "Booth's Physicians, Drs. May and Mudd."

Something should be said here about Dr. Nichols, who is not only highly regarded by the medical profession as a physician but as a gentleman and a scholar. Recently he completed a history of the Medical Society of the District of Columbia. He studied all material available from 1833 to 1944. This required many months of painstaking work. Before long this work should be obtainable by those interested in the history of medicine in the Nation's Capital.

Invitations have been extended to all physicians in the District to the Historical Society's meeting. There is no doubt that those who attend will be well rewarded.



GEORGE TULLY VAUGHAN, M.D., LL.D., F.A.C.S.

GEORGETOWN HONORS DR. VAUGHAN

A portrait in oil of Dr. George Tully Vaughan, Emeritus Professor of Surgery, by John Bjorn Egeli, a Washington artist, was presented to the Medical School of Georgetown University on Monday evening, October 16, by members of the Medical Alumni Association. Dr. Vaughan was Professor of Surgery at Georgetown University and Chief of Surgery at the Georgetown University Hospital for 36 years, from 1897 until 1933, and since then has been serving as a member of the Executive Faculty and Council and as Administrative Advisor to the Medical School.

Dr. Vaughan graduated in medicine from the University of Virginia in 1879 and from the Bellevue Hospital Medical College in 1880. After a period of private practice in and near Farmville, Virginia, he entered the United States Marine Hospital Service in 1888. He served in various capacities in this country and abroad and resigned from the Service in 1906, after having reached the grade of Assistant Surgeon General.

During the Spanish-American War he was loaned to the United States Army and served as Major and Brigade Surgeon of the Seventh Army Corps at Jacksonville, Florida. Since the casualties were light and he did not reach the zone of active operations most of his work in this war had to do with the treatment of typhoid fever.

He was appointed to the Chair of the Principles and Practice of Surgery at Georgetown in 1897 and was active in clinical and didactic teaching for 36 years.

After the Vera Cruz incident in 1914 he was operating surgeon for 4 months at that port with the United States Navy. He served with the Navy again during the World War, most of the time as Chief Surgeon on the *U.S.S. Leviathan.* He made 20 Atlantic crossings on this ship.

Dr. Vaughan published a textbook, "The Principles and Practice of Surgery" in 1903 and a volume of "Papers on Surgery and Other Subjects" in 1932. The latter volume lists some 130 articles and does not include all of his contributions to medical and surgical literature.

He is a member of many medical and surgical societies, including the International Surgical Association, the American Surgical Association, and the Southern Surgical Association, and was a founder of the American College of Surgeons.

The meeting on October 16 was presided over by Dr. William P. Herbst, President of the Medical Alumni Association.

Surgeons General Ross T. McIntire, Norman T. Kirk and Thomas Parran of the United States Navy, the Army and the Public Health Service, respectively, outlined Dr. Vaughan's service in each of these branches and paid tribute to the excellence of his service in each of them. Dr. Joseph S. Wall, Professor of Pediatrics, the sole survivor of Dr. Vaughan's first class at Georgetown, outlined his service as a teacher.

The Rector of Georgetown University, the Very Reverend Lawrence C. Gorman, S.J., spoke of the plans for the new University Hospital, and the Dean of the Medical School, the Reverend David V. McCauley, S.J., paid tribute to Dr. Vaughan's continued service.

A plaque exhibiting a photograph of the portrait and an engrossed scroll of the resolutions of the Alumni Association were presented to Dr. Vaughan.

Dr. Vaughan responded gracefully to these congratulations.

Calendar of Meetings

October 13	Sports Committee
October 16	Board of Censors
October 17	Subcommittee on Constitution and By-laws
October 18	House Committee
October 19	Medical Bureau Committee
October 20	Program Committee Editorial Board, Medical Annals
October 21	Section on Pathology
October 23	Executive Board Committee on Public Policy
October 25	Scientific Meeting of Society
October 26	Subcommittee on Prepaid Medicine
October 30	Committee on Rehabilitation of Service Physicians

MEETINGS

Wednesday, December 6

The District of Columbia Tuberculosis Association will present the following program:

"The Handling of the Asymptomatic Minimal Case of Pulmonary Tuberculosis."

H. McLeod Riggins, M.D., F.A.C.P., Director of Medicine, Triboro Hospital, Jamaica, L. I.

Wednesday, December 13

Panel Discussion on Anesthetic Accidents

1. "Nonfatal Complications of Anesthesia," Major Lloyd H. Mousel, M.C., A.U.S., Chief, Department of Anesthesia, Walter Reed General Hospital.
2. "Study of Deaths under Anesthesia," Donald H. Stubbs, M.D., Associate in Surgery, George Washington University School of Medicine
3. "Resuscitation," Joseph Kreiselman, M.D., Washington

Questions from the floor.

War Section

NEWS OF OUR MEMBERS IN THE SERVICES

The most recent additions to our Honor Roll are Dr. Hector C. McKnew, who is serving at the Veterans Administration Facility in Los Angeles, California, and Dr. George H. Crofton, also with the Veterans Administration but located in Washington, D. C.

Recent promotions in rank which have come to the attention of the Editorial Board are as follows:

Ellis April, from First Lieutenant to Captain
George L. Ball, from Lieutenant Colonel to Colonel
Crenshaw D. Briggs, from Major to Lieutenant Colonel
C. Willard Camalier, Jr., from First Lieutenant to Captain
Frank B. C. Geibel, from Lieutenant Commander to Commander
Luther W. Gray, from Major to Lieutenant Colonel
Clayton H. Hixson, from Major to Lieutenant Colonel
Sydney Leventhal, from First Lieutenant to Captain
Stuart W. Lippincott, from Major to Lieutenant Colonel
William A. Ryon, from Captain to Major
John T. Schnebly, from Captain to Major
Richard H. Spire, from First Lieutenant to Captain
John C. Sullivan, from Major to Lieutenant Colonel

LETTERS FROM SERVICE PHYSICIANS

From Lt. Comdr. John R. Cavanagh, U. S. Naval Hospital, Seattle, Washington:

Dear Mr. Wiprud: Have been meaning to write for some time and give you my new address, which is U. S. Naval Hospital, Seattle. I have been here since April 17.

I think I told you that the Navy has made me a neuropsychiatrist—a subject in which I have always been interested.

On October 8, 1944 we had a new baby in our house—Marie Antonia. She sends best wishes to all her prospective friends in Washington.

Would like to be back there and see some of our friends and it should not be long with the way the war goes on.

From Lt. Comdr. Morris I. Bierman, c/o Fleet Postoffice, San Francisco, Cal.:

Dear Ted: So you are now a professor! Get out your new bifocals and cast your glance over their rims at the sleeping students. . . .

If you are now a medical economist, I have got just the plan to make you famous and revolutionize the world. It is guaranteed to take money out of the Treasury, increase taxes, please our pink brethren and keep New Deal's hands off the physician himself. The plan is simple; it is merely that the Treasury pays the complete hospitalization fee in proportion to one's earnings, to wit:

Earnings Below	*Proportion % Paid (Married)*	*Proportion % Paid (Single)*
$ 900	98	85
1–2000	95	50
2–3000	80	25
3–4000	70	20
4–5000	60	15
5–7500	40	5
7500–10,000	25	5
10,000 and above	10	5

So you see how easily the world's problems are solved. Then if each physician charges according to the patient's means and you have local boards to review fees in dispute, you have a New-Deal-proof setup.

A couple of days ago I got a notice and a ballot to vote for President this spring. I am wondering whether you meant spring in the States or spring here just under the equator which begins September 21. I am withholding my ballot pending clarification of this point. If it was not meant for our seasons down here, I will save it for next spring in the U.S.A.

Not much worthwhile reading gets by the censor. Being in the amphibious force, I have been lucky enough to get to see all phases of such warfare. It is very interesting and of sufficiently little hazard not to dampen the enthusiasm. The practice of medicine is just one fungus after another due to the

(*Continued on page 438*)

HEALTH DIVISION REORGANIZED

Elizabeth Harvey

Health Secretary, Council of Social Agencies

A Health Council "by any other name" goes just as far. Whether it is called a Health Council, a Public Health Federation, or, as is the case in Washington, the Health Division of the Council of Social Agencies, its function is the same—to coördinate the efforts of public and private health agencies and to achieve community planning in the field of public health. The place a Health Council can fill in a community was well described in the editorial on that subject in the last issue of Medical Annals.

At its first meeting of the year the local Health Division of the Council of Social Agencies redefined its purposes in this manner: "To coördinate activities of public and private health agencies; to promote coöperation among them; to prevent duplication; to eliminate waste of resources and effort; to raise standards; to promote further community health planning, research and education." A step taken by the Health Division toward setting up the machinery to accomplish these purposes is the establishment of a new "Coördinating Council." At this first meeting of the year, held late in September, Dr. Herbert P. Ramsey, Chairman of the Health Division, read the incomplete roster of the names of those who have accepted membership on the Coördinating Council. The complete list of membership for this body should be ready for the next issue. This Coordinating Council, which will serve as the governing board of the Health Division, will have the power to weigh and put into effect recommendations made by subcommittees composed of professional persons interested in a particular health field.

Further reorganization of the Health Division was effected in its action to limit its membership to those agencies or organizations whose primary concern is in the field of health, defining as associate members those agencies or civic organizations which have a working committee on health. The Coördinating Council was also empowered to grant membership, not to exceed fifteen, to individuals interested in health.

Among the recommendations adopted at the meeting mentioned above is one stating that "The Health Division will maintain within itself full autonomy with respect to health policies and through its officers and Coördinating Council will furnish needed cooperation with other divisions of the Council of Social Agencies."

The tightening up of organizational structure within the local Health Division is in line with steps recently taken by the National Committee of Health Council Executives. This National Committee accepted a new "Plan of Organization" and recently compiled "Principles Essential for the Effective Organization and Functioning of a Health Council" at its annual meeting, held October 3, at the Conference of the American Public Health Association in New York. When these principles were applied to questionnaires sent out, a number of Health Councils and Health Divisions of Councils of Social Agencies, including Washington, qualified as regular members while the others may attend the meetings as visitors until they meet requirements.

These "Principles Essential for the Effective Organization and Functioning of a Health Council" state that:

"A Health Council must be thoroughly representative of the recognized health forces of the community. It should have among its members lay people and representatives of the official health agency or agencies, of organized medicine, of organized dentistry and of organized nursing, as well as representatives of the unofficial agencies interested primarily in public health work. It should be without limitation as to race or creed. Liaison with recreational and welfare organizations is essential. . . .

"A Health Council shall promote the efficient operation of public health work through the coördination of the health activities within the area . . . by means of the elimination of duplication of effort and by the stimulation of new and needed services.

"A Health Council should aid in developing public opinion with respect to public health needs, programs, and legislation.

"A Health Council may render common services in such fields as statistics and research, and health education.

"It should not render direct services except for such demonstration purposes as may meet with the approval of the local health agencies and should avoid competition with its member agencies. . . .

"A Health Council, to function effectively, should have full scope to determine its own policies consistent with accepted public health principles. Its organic relationship with the Council of Social Agencies may vary in different communities, but the Health Council should work in coöperation and harmony with both the Council of Social Agencies and the Chest or Fund."

Examples of ways in which the local Health Division of the Council of Social Agencies has been instrumental in the past in filling the gaps in the community health program are: establishing the Washington Institute of Mental Hygiene; helping to obtain sight conservation classes in the public schools; initiating the plan to establish Group Hospitalization. Just this year funds were allocated for a Mental Hygiene Unit in the Health Department, although in smaller amount than had been hoped for. This is a project for which the Health Division has worked for many years.

A brief but comprehensive health and hospital survey of Metropolitan Washington and forums on health subjects of interest are among the plans of the Health Division for the immediate future. As a result of the survey the Division expects to plan with greater certainty for filling in the gaps in the health program.

There can be no doubt about the fact that there are gaps or unmet needs in the health picture in Washington. For example, the fact that cancer ranked second as a cause of death here in 1943 shows a need. Likewise, National Selective Service has emphasized the enormous number of rejections for dental defects. The survey contemplated should show whether there are lacks in the facilities in these and many other fields.

WOMAN'S AUXILIARY NOTES

The Woman's Auxiliary to the Medical Society of the District of Columbia held its first meeting of the season in the auditorium of the Medical Society's building. Mrs. James N. Greear, Jr., the newly elected President, presided. Assisting the President were the following officers:

Mrs. John J. Shugrue, *First Vice President*; Mrs. Gilbert B. Rude, *Second Vice President*; Mrs. Edgar E. Quayle, *Recording Secretary*; Mrs. William J. B. Orr, *Treasurer*; Mrs. George W. Reeves, *Corresponding Secretary*; Mrs. Thomas Thompson, *Parliamentarian*; and Mrs. Edward L. Morrison, *Historian*.

A moving picture in technicolor, entitled "According to Plan," sponsored by the Community War Fund, was shown, followed by a short address on the returning soldier by Mr. Benjamin Aronsohn. Mrs. Gilbert, Chairman of the Ways and Means Committee, announced plans for a benefit luncheon to be held in the Medical Society's building on Tuesday, November 14. The following Chairmen of the Standing Committees and their members were announced:

MEMBERSHIP COMMITTEE: Mrs. Leon A. Martel, *Chairman*; Mmes. Richard H. Todd, Thomas B. Crisp, Frank R. Shea and A. Magruder MacDonald.

PROGRAM COMMITTEE: Mrs. Albert E. Marland, *Chairman*; Mmes. William Earl Clark, Harold R. Downey, J. Chester Brady, Frank J. Eichenlaub and Joseph F. Elward.

WAYS AND MEANS COMMITTEE: Mrs. Joseph L. Gilbert, *Chairman*; Mmes. William M. Ballinger, Richard E. Dunkley, Andrew Browne Evans, Ernest E. Hadley, William J. B. Orr and Richard H. Todd.

SOCIAL COMMITTEE: Mrs. Harry Ford Anderson, *Chairman*; Mmes. Fred A. J. Geier, Horatio N. Dorman, Watson W. Eldridge, Caryl Burbank, Francis X. McGovern and William M. Ballinger.

PUBLICITY COMMITTEE: Mrs. A. Magruder MacDonald, *Chairman*; Mmes. Edgar M. McPeak, L. Brison Norris.

HOUSE COMMITTEE: Mrs. Harry S. Lewis, *Chairman*; Mmes. George Crofton, Henry A. Hornthal, Thomas B. Crisp, J. Chester Brady, Anne Lewis and Harry Sacks.

PUBLIC RELATIONS COMMITTEE: Mrs. Henry A. Hornthal, *Chairman*; Mmes. Harold R. Downey, George Dewey, E. Leonard Goodman and Don S. Knowlton.

PHILANTHROPIC COMMITTEE: Mrs. Harold R. Downey, *Chairman*; Mmes. Thomas A. Egan, Henry A. Hornthal, Don S. Knowlton and L. Conner Moss.

HYGEIA COMMITTEE: Mrs. Fred R. Sanderson, *Chairman*; Mmes. Robert E. Moran, Daniel L. Borden, Don R. Johnson and Ralph Carbo.

LIAISON COMMITTEE: Mrs. Arch L. Riddick, *Chairman*; Mmes. R. Lomax Wells, Frank M. Hand and Weston Bruner, Jr.

BULLETIN COMMITTEE: Mrs. William Earl Clark, *Chairman*.

FINANCE COMMITTEE: Mrs. William P. Herbst (newly appointed member).

EDUCATIONAL COMMITTEE: Mrs. Duane C. Richtmeyer (newly appointed member).

SPECIAL RED CROSS COMMITTEE: Mrs. Charles H. McEnerney, *Chairman*.

NEW AUXILIARY PRESIDENT

MRS. JAMES N. GREEAR, JR.
President, Woman's Auxiliary to the Medical Society of the District of Columbia, 1944–1945

Following the meeting a delightful luncheon was served in the library by the very efficient House Committee, of which Mrs. Lewis is the Chairman. Mrs. Sanderson and Mrs. MacDonald, Past Presidents, also assisted.

The Auxiliary is looking forward to a very successful year under the able leadership of its new President. Mrs. Greear is a native Washingtonian and attended the local public schools. She is a graduate of Goucher College and is affiliated with the Washington Alumnae Club of Pi Beta Phi, serving as President a few years ago. She is also a member of the Twentieth Century Club. In 1927 she married Dr. James N. Greear, Jr., who is now in command of the Valley Forge General Hospital in Phoenixville, Pa., with the rank of Lieutenant Colonel.

She has led a very active life, giving freely of her time to church work and to the rearing of her three active and attractive children, Mary Alese, James Noah III, and Betsy Gene. The Auxiliary wishes its newly elected President and officers every success.

MRS. A. MAGRUDER MACDONALD
Publicity Chairman

MEMBERSHIP

The following applicants for membership were duly elected to membership at the business session, October 25, 1944:

Active Members

Russell F. Cahoon, 1726 Eye Street, N.W.
Frank S. Caprio, 1835 Eye Street, N.W.
Gottfried K. Duschak, 2021 Que Street, N.W.
John R. Ewan, 1801 Eye Street, N.W.
Benjamin Karpman, 1801 Eye Street, N.W.
Gerald H. McAteer, 4107 W Street, N.W.
Russell Crandle Payne, 1801 Eye Street, N.W.
William R. Perkins, Jr., 1463 Rhode Island Ave., N.W.
Clarence L. Purdy, 1503 Good Hope Road, S. E.
James Ross Veal, 1028 Connecticut Ave., N.W.

Associate Members

Ruth Esther Standard, 8739 Colesville Road, Silver Spring, Md.
Ruth E. Stocking, 1514—17th Street, N.W.
Edith Hildegard Weigert, 12 Oxford Street, Chevy Chase, Md.

The following applicants for membership will be voted on at the business session, January 10, 1945:

For Active Membership

Joseph E. Brackley, Georgetown University—1938
George D. Denton, Queen's University, Kingston, Ontario, Canada—1928
Louis M. Eble, University of Pennsylvania—1925
Harold R. Feinstein, New York University—1938
Herbert A. Goldberg, St. Andrews University, Scotland—1935
Elizabeth W. B. Goldsworthy, University of California—1916
Clark Paul Halstead, Georgetown University—1937
Josiah B. Henneberger, George Washington University—1913
Harold Lester Hirsh, Georgetown University—1942
Oscar B. Hunter, Jr., Georgetown University—1940
James R. Hurley, Tufts Medical School—1938
Ludwig G. Lederer, Northwestern University—1937
Emmett P. Madigan, Georgetown University—1943
Donald W. Mitchell, Long Island College of Medicine—1936
Anna Neumann, Vienna University, Austria—1928
Frank S. Pellegrini, Georgetown University—1939
Roger Stanley Williams, Medical College of Virginia—1937

For Associate Membership

Harvey H. Ammerman, George Washington University—1943
Ella R. Fales, National University—1900

(*Continued on page 438*)

On The Home Front

The Washington Academy of Sciences has been allotted funds from the Academy Grants Fund of the American Association for the Advancement of Science for grants-in-aid to young and promising scientists who are engaged in worthwhile research but lack the funds to continue their work. The sum of $350 is now available. Application for grants-in-aid may be made by any member of the Academy or one of its affiliated societies, or by one or more individuals, providing the total sum does not exceed $350.

Letters of application should be addressed to the Secretary of the Washington Academy of Sciences, F. G. Brickwedde, National Bureau of Standards, Washington, D. C., and should be in his hands not later than February 1, 1945. As far as possible the proposed projects should not be related to the research being carried on as a part of the applicant's regular duties. This applies particularly to those who are associated with some governmental agency or private research institution.

The Sixth War Loan Campaign began November 20. **Dr. W. Calhoun Stirling** was reappointed Chairman of the Medical Division of the District War Finance Committee. Vice Chairmen who have been appointed to assist him in promoting the Campaign through twelve hospitals in the District are as follows:

GARFIELD—Dr. Emil J. C. Hildenbrand
DOCTORS—Dr. W. Ross Morris
CASUALTY—Dr. X. Charles Suraci
EMERGENCY—Dr. Frederick C. Fishback
CHILDRENS—Dr. William F. Burdick
GEORGE WASHINGTON—Dr. Robert H. Harmon
EPISCOPAL—Deaconess Anna E. McDonald
COLUMBIA—Dr. Elijah W. Titus
HOMEOPATHIC—Dr. J. B. Gregg Custis
SIBLEY—Dr. John M. Orem

No appointments have been made at the present time for Providence and Georgetown Hospitals.

Brigadier General J. R. Rees, Consultant Psychiatrist to the British Army, will deliver the **Salmon Lectures** for 1944 at the New York Academy of Medicine, 2 East 103rd Street, New York City, on November 20, 21 and 22, at 8:30 p.m.

Captain in the R.A.M.C. in the first World War, General Rees saw service in Belgium, France, Mesopotamia and North Persia. He was formerly Neurologist, Ministry of Pensions, and Medical Superintendent, Bowden House. He now holds the post of Medical Director, The Tavistock Clinic (The Institute of Medical Psychology).

The Section on Pediatrics held its meeting, October 19, at the Children's Bureau. The following program was presented: "Recent Data on Infant Mortality in the United States," Dr. Marjorie E. Gooch; "Effect of Rickets in Infancy on the Skeletal Development of Adolescent Children," Dr. Ethel C. Dunham; "Programs for Children with Rheumatic Fever," Dr. Betty Huse. Models of hospital nursery and pediatric units were demonstrated.

The Washington Ophthalmological Society met November 6 in the Medical Society's building. Dr. Frank Walsh of Baltimore was the guest speaker; his subject, "Some Syphilitic Involvements of the Optic Nerve." Dr. James S. Dryden gave a case report on "Glaucoma, Acute, Secondary to Luxated Intumescent Lens." Cases were presented for demonstration by Drs. Sterling Bockoven, Joseph Dessoff, Thomas A. Egan, Dorothy B. Holmes, Thomas R. Rees and Roy A. Stewart.

Officers for the Society for 1944–45 are as follows:

Dr. Harold R. Downey, *President;* Dr. John R. Lloyd, *Vice President;* Dr. Richard W. Wilkinson, *Secretary-Treasurer.*

The Clinico-Pathological Society met October 17 at the home of Dr. Homer G. Fuller. Two case reports were presented: "Multiple Pulmonary Infarcts" by Dr. Lewis C. Ecker; "The Treatment of

Intractible Pain with Special Reference to the Use of Ammonium Salts" by Dr. Donald Stubbs.

The following officers were elected for the year 1944–45:

Dr. Henry L. Darner, *President;* Dr. Lewis C. Ecker, *First Vice President;* Dr. Charles P. Howze, *Second Vice President;* Dr. Bernard W. Leonard, *Secretary-Treasurer.*

The George Washington University Medical Society held a Panel Discussion on Virus Diseases at its first fall meeting, October 21. Participants were Comdr. William Travis Gibbs, Jr., M.C., U.S.N.R., U. S. Naval Hospital; Captain Loring Whitman, M.C., U.S.A., Assistant Chief, Division of Virus and Rickettsial Diseases, Army Medical Center, and Dr. Charles Armstrong, Chief of the Division of Infectious Diseases, National Institute of Health. The clinical, laboratory and public health aspects of virus diseases were discussed by Comdr. Gibbs, Captain Whitman and Dr. Armstrong, respectively.

Major General Norman T. Kirk, Surgeon General of the U. S. Army, recently received the honorary degree of Doctor of Science from his alma mater, the University of Maryland, at Baltimore. The citation was read by Major General Robert U. Patterson, Dean of the Medical School and former Surgeon General of the Army. Prior to the ceremonies, Dr. H. C. Byrd, President of the University, and members of the faculty of the Medical School gave a dinner in honor of General Kirk at the Hotel Belvedere.

General Kirk has also recently been elected to membership in the National Committee for Mental Hygiene in recognition of his "unusual awareness of the importance of skilled psychiatric treatment in the Army."

Dr. Sterling Ruffin, Professor Emeritus of Medicine of George Washington University, was honored by the University when President Cloyd H. Marvin dedicated the October issue of the news bulletin, *Confidential—from Washington,* to him. Dr. Ruffin graduated from George Washington University in 1890. He was Professor of Medicine from 1902 to 1924, when he was given the rank of Professor Emeritus. The honorary degree of Doctor of Science was conferred upon him by the University in 1932.

Dr. Sterling V. Mead, Past President of the District Dental Society, was chosen **President-elect of the American Dental Association** at its annual meeting in Chicago, October 18. He will be installed as President at next year's convention.

STERLING V. MEAD, D.D.S.
President-elect of the American Dental Association

Dr. Mead was born in Stafford, Kansas, October 16, 1888. He came to Washington originally as Secretary to the late Senator Thompson of Kansas. He graduated from George Washington University School of Dentistry in 1914 and for 10 years was Professor of Oral Surgery at Georgetown University. He has been Vice President of the American Dental Association and during the past year has been Chairman of its Legislative Committee. He holds membership in the American Society of Oral Surgeons and since 1927 has been an Associate Member of the Medical Society of the District of Columbia. He is the author of "Diseases of the Mouth," "Oral Surgery" and "Anesthesia in Dental Surgery," and is a frequent contributor to scientific journals.

Dr. Mead maintains his office at 1149 Sixteenth Street, N. W., limiting his practice to oral surgery.

Mr. Wilmer J. Waller, Chairman of the District War Finance Committee, presented citations at the meeting of the Medical Society, October 25, to the following members and officers who took part in the Fifth War Loan Campaign: Drs. W. Calhoun Stirling, George J. Brilmyer, Fred A. J. Geier, Casimir Leibell, John M. Orem, X. Charles Suraci, J. Russell Verbrycke, Jr., and Mr. Theodore Wiprud.

Dr. John A. Reed has been appointed to a committee of the American Diabetic Association which will coöperate with the Food and Drug Administration. Dr. Reed was also recently elected an Associate Member of the American Gastroenterological Association.

Dr. J. W. Peabody addressed the 46th Annual Convention of the American Hospital Association in Cleveland, Ohio, October 4, on the subject, "The General Hospital and Postwar Planning in Tuberculosis Control."

Dr. Walter A. Bloedorn, Dean of George Washington University School of Medicine, was elected a member of the Executive Council of the Association of American Medical Colleges.

Dr. J. Ross Veal spoke on "Surgery of Peripheral Venous Thrombosis" at the meeting of the Southern Medical Association in St. Louis, Mo., November 13–16.

Dr. Herbert P. Ramsey was one of the speakers at the meeting of the Alumni Association of the Medical College of the State of South Carolina, November 2, in Charleston. His address was entitled, "Life-saving Measures in Obstetrics."

Major Henry B. Gwynn, M.C., A.U.S., of the Reconditioning Consultants Division, Office of the Surgeon General, has recently been appointed liaison officer with the American Red Cross.

Drs. Charles Stanley White and Jacob J. Weinstein were among the scientific exhibitors at the Annual Meeting of the Medical Society of Virginia, held in Richmond, October 23–25. Their exhibit was entitled, "Preparation of Plasma by Sedimentation (a New Method)."

Dr. Herman E. Hilleboe spoke before the Virginia Society of Chest Physicians at a luncheon meeting at Pine Camp, Va., October 25.

Among the registrants at the 16th ANNUAL SCIENTIFIC ASSEMBLY were the following members of the Society in military service stationed outside of Washington and nearby states: Major Theodore J. Abernethy, from Fort Bragg, N. C.; Lt. Robert J. Coffey, serving on the *U. S. S. Iowa*; Comdr. Gerald A. Hopkins and Lt. Comdr. William C. Meloy, both serving recently on the *U.S.S. Pinckney* and stationed presently at the Naval Dispensary, Washington; Lt. Comdr. Reginald H. Mitchell, serving recently on the *U.S.S. Lackawanna*; Comdr. Henry A. Monat, from the U. S. Naval Hospital at St. Albans, Long Island, New York; Major Leo V. Schneider from Brooklyn, New York.

Visitors at the Society's offices, October 16, included two other members in service, Lt. Colonel M. C. Dollman, from Fort McDowell, Calif., and Major Thomas Bradley, from Ellington Field, Houston, Texas.

Among the speakers at the **Third Annual Health Institute of the Southwest Health Council,** October 28, were **Dr. Joseph A. Murphy,** Director of School Medical Inspection Service for the District of Columbia, and **Dr. A. B. Coulter,** Director of the Bureau for Tuberculosis. Dr. Murphy used for his theme, "It Is Not the Kind of a House, but the Kind of Person Who Lives There," stressing the importance of mental hygiene in the home, and Dr. Coulter spoke on "The Prevention of Tuberculosis.'

Dr. R. L. DeSaussure, Director of the Southwest Health Center, addressed the meeting of the Southwest Citizens' Association, October 24.

Sixty-five honorary civilian consultants to the Army Medical Library convened at the Library of Congress for the purpose of organization, October 6 and 7. Dr. Morris Fishbein was named a member of the Executive Committee. Approval was given by the group to a proposed site for the new $4,750,000 Army Medical Library to be located near the Library of Congress.

Dr. Fishbein was guest speaker, October 5, at a dinner meeting of the consultants at the Statler Hotel.

Sister Elizabeth Kenny's first documentary film on her method of treatment for poliomyelitis was shown by the District Health Department in the Medical Society's building, October 20. The auditorium was filled to capacity by members of the Medical Society, Army and Navy medical officers, officials of the United States Public Health Service and the District Health Department, foreign representatives, nurses and educators.

WILLIAM PATTERSON CLARK HAZEN, M.D.

(1853–1944)

Dr. William P. C. Hazen, a Life Member of the Medical Society, died October 29, 1944, at his home, 511 East Capitol Street, after a prolonged illness. He had been a practicing physician in Washington for 57 years.

Dr. Hazen, who was the last survivor of a family of eight children, was born in Lower Mount Bethel, Penna., April 27, 1853. He drove to Washington in a buggy to take a position as apothecary in the United States Naval Hospital. The fact that his elder brother David was a physician probably influenced him to choose a medical career. He received his medical education at Georgetown University School of Medicine, a member of the graduating class of 1877, of which there were two. Prior to his death he was the oldest living graduate of that University.

He completed his internship at Washington Asylum Hospital, now Gallinger Municipal Hospital, and served as visiting physician at that institution from 1882 to 1884. He entered private practice in 1884 and continued in practice until his retirement about ten years ago. When Guiteau was hanged for the assassination of President Garfield, it was Dr. Hazen who pronounced him dead.

In addition to his profession, Dr. Hazen was active in many civic projects. He was one of the founders of Emergency Hospital, a charter member of Casualty Hospital, a founder and former Vice President of the National Capital Bank, a member of the Washington Board of Trade, and a trustee of the Washington Savings Bank.

He was a Fellow of the American Medical Association. In 1879 he was elected to membership in the Medical Association of the District of Columbia, which was later amalgamated with the Medical Society of the District of Columbia. Since 1929 he has been a Life Member of the Society.

Surviving him are three daughters, Mrs. Martin R. Bourne, of Philadelphia, Penna., and Mrs. Clifton Laughlin and Mrs. Katharine O'Toole, of Washington.

(*Continued from page 431*)

heat below decks, but the various tasks of the ship and the scenes on shore keep one contented.

With best regards, and hoping to see you again sometime soon.

From Captain T. Frasier Williams, c/o Postmaster, New York, N. Y.

Dear Mr. Wiprud: The news letter has been late many times due to our many moves but it always reaches me. I want to thank you for the work you put into its publication. When mine arrives I read it and send it to my wife, who has been in California since I came into the Army. We both think it's swell.

My work is different from that of civilian life but very interesting. The maxillofacial man has one 12-hour shift and I the other. Since joining this unit I have also had to do the eye work.

Some of us have been doing consultation work for the all too few French physicians here. After one such case the other day, the physician had me out to dinner. There is a scarcity of staple products but believe me I'm convinced that as to food, they are O.K. at least in the agricultural areas. I might add that there are still a few bottles of champagne as well. It was an interesting experience.

Thank you again. I want to assure you I am intensely interested in everything that you tell us in the letter.

(*Continued from page 434*)

Irvin M. Grassgreen, Tulane University—1935
Rowland Stanton Philips, University of Pennsylvania—1918
Rebecka S. Schneider, Kharkov University, Russia—1917

Recent changes in membership status:

Reinstated to Active Membership

May D. Baker

Resigned
Associate Members

Edna F. Patterson
Alfred H. Richwine

MEDICAL ANNALS
of the
DISTRICT OF COLUMBIA

VOLUME XIII — *December, 1944* — NUMBER 12

MEDICAL CARE FOR VETERANS AND CIVILIANS*

JOHN P. PETERS, M.D.
Professor of Medicine, Yale University School of Medicine

TRADITIONALLY the healing art has been regarded as akin to religion, with physicians occupying the position of priests. Undue emphasis has been placed upon personal ministrations, and such concepts as the "bedside manner" and "free choice of physician" have been raised to the level of fetishes. Lack of humanity, sympathy and kindliness is deplorable in any man; the possession of these ingredients of the bedside manner is something to be assumed, not especially noteworthy or commendable. The addition of the blandishments of the salesman is no useful substitute for competence and knowledge.

PANEL DISCUSSION ON THE FUTURE OF MEDICINE

In this issue of the Medical Annals are published the addresses given by participants in the Panel Discussion on the Future of Medicine, one of the outstanding features of the 16th Annual Scientific Assembly.

We regret very much that we were unable to obtain a copy of the address made by Dr. Thomas Parran, Surgeon General of the United States Public Health Service. He spoke extemporaneously and no arrangements had been made to transcribe his remarks or to prepare an abstract of them.

It is to be hoped that all physicians who receive the Annals will read these addresses. They are, we believe, an important contribution to the literature on the most controversial issue of our time. Whether or not we agree with the views expressed, they provide a background for a better understanding of the problems which must be met.

Editorial Board

When I entered my professional career, science and the scientific method were regarded as all right in their places, but this was not at the bedside, where only art and the proper manner were required. At the present time no one has to defend the science of medicine. The public does, to be sure, still support cults that eschew the scientific method or accept science only with a religious prefix. But both physicians and laymen fail to accept the implications of medical science in two respects that are fundamental to the solution of the problem of medical care. First, it is not fully appreciated that those who are to apply scientific methods must have enough knowledge to understand what they are doing and the facilities and assistance required for those procedures. Second, the same ruthless logic must be applied to the development of machinery for the provision of medical care that has been so valuable in the development of diagnostic and therapeutic measures.

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* This address, a part of a Panel Discussion on the Future of Medicine, was presented at the Sixteenth Annual Scientific Assembly of the Society, October 7, 1944.

The public regards medical care in terms of the distribution of physicians, as if these were more or less interchangeable units, purchasable at a standard price, and as if the mere exposure of a patient to a physician assured all the benefits of modern medicine. All its solutions of the problem are predicated on the principle of distribution measured in terms of cost. A certain proportion of the population cannot support the costs of their own medical care. Physicians can no longer afford to contribute their services to this group gratuitously. Modern medical care does not consist of mere personal services, but requires equipment, facilities and expert assistants. Those who supply these perquisites do not adhere to the altruistic ethical standards of the medical profession; they follow the tradesman's code. Amid the clamor about expense to the patient a better spirit might be engendered if it were recognized that expenses of the physician have increased proportionately. Another fraction of the population can sustain part of the costs of medicine if it is distributed among them; still others could support the whole costs on the same principle. Only a small proportion are so affluent that catastrophic disease or disability may not reduce them to poverty. Ultimately the public pays the cost of illness indirectly in loss of manpower and human inefficiency, directly in relief measures. It is, therefore, to its interest to check this waste at its source. Thus broadly outlined, these are inescapable facts, whatever differences there may be as to the relative sizes of these groups. If the people at large are to receive medical care, for a certain proportion, at least, it will have to be provided at public expense. It would be deplorable, I think, if they were compelled to submit to a means test. But what I have to say today would apply to private as well as public insurance.

Provision of service differs sharply from payment of cash. Cash can be measured in purely quantitative terms; service has the additional dimension of quality. High quality cannot be purchased cheap; but no amount of expenditure will assure quality if special consideration is not given to this element in a health program. Like the public at large, the military authorities seem to have considered numbers and distribution of physicians in their plans for medical care of the armed forces, rather than quality. Their educational program was so set up that the quality of young physicians has been compromised for more than five years unless some means can be found to allow the young medical officers to complete or supplement their education. Even if we did not owe these officers a solemn debt for their services and sacrifices, we should be compelled for the protection of the health of the Nation to rectify these educational errors. This will be the largest problem of rehabilitation and relocation of physicians which has ever confronted us.

The solutions thus far offered are, as usual, chiefly limited to distribution, the allocation of these men to areas in which there is a scarcity of physicians. Surely this policy has proved futile in supplying civilian needs during the War. Will it be more successful when applied to men who have learned the value of physical facilities, well equipped hospitals and organized services for the proper practice of their profession? These things cannot be made available under the present system of competitive practice; organized practice is so rare as to be almost accidental; facilities, including hospital privileges (where there are hospitals) do not become available on mere proof of competence and integrity. Desirable mobility cannot be secured under a system which forces the newcomer to risk an established livelihood on the chance that he may attract enough patients to his office in competition with others who must regard his advance with jealousy and try to exclude him from access to the hospitals and other privileges they enjoy.

Increasingly the best men from all medical schools are seeking interneships in "teaching hospitals," especially those which are directly connected with medical schools and which have full-time staffs. Remuneration of internes by other hospitals has not seriously retarded this trend. In the teaching hospitals, internes are assured education; they are not merely exploited. They are brought into intimate contact with and allowed to participate in investigative work, the medicine of the future. They can receive systematic training in special technics. The most able graduates of our teaching hospitals are not content to settle in communities which lack the resources required for the exemplary practice to which they have become accustomed, which offer them no opportunity to advance with the progress of medicine, to differentiate themselves by developing special skill under competent leadership.

If medicine were centered about hospitals with organized and coördinated staffs, every one of these hospitals could become an educational and investigative institution. Such organization and coördination cannot be achieved unless fee-for-service payment is replaced by salaries and unless the public assumes responsibility for the costs of medical services to those who cannot personally sustain these costs. Neither teaching nor the care of the needy sick can be conducted in a responsible manner if they are merely avocations. Neither teaching nor learning can be treated as mere by-products. It is impossible to delay long the day when internes and residents in our hospitals are paid in proportion to their services to the community. We cannot afford to interrupt the continuity of their professional and educational activities as soon as they complete interneships and residencies by exposing them to the risks of private competitive practice without the facilities, hospital privileges and associations they have learned to value. Such continuity is impossible unless the practice of medicine is properly integrated with duties defined in some measure and with some financial security.

It is claimed that our system of practice should be retained because under it American medicine has come to its present high estate. This is altogether post hoc reasoning. The great advances of American medical science have come almost entirely from full-time men, working on salary in medical schools, hospitals and other institutions. The practising physician has been relegated to the position of distributor. Too often because of his isolated position he is not fully conversant with the implements he is using. The potentialities of medical science cannot be translated into actual benefits to society until this situation is changed. Reorganization of the kind I have suggested is essential to restore the physician to the position of producer of medicine and to accelerate the progress of medical science.

A large proportion of the physicians now with the military forces wish to supplement or refresh their education when they return to civil life. The opportunity cannot be afforded them merely by providing cash benefits. Existing medical schools and teaching hospitals cannot assume the burden. The majority of other hospitals are as unfitted for this educational task as for the training of internes and residents. It would be indecent to use these men who have served with the military forces for the convenience of such hospitals and the physicians who work in them. In response to questionnaires, 60 per cent of the medical officers have announced a preference for group practice. The field should be prepared that they may realize their ambitions.

The physical examination data collected by Selective Service and Induction Stations should be a national concern, but not a surprise. The opinion that they could be improved by merely providing more care under the present system of practice is not realistic. It is implicit in a system of competitive private practice with payment of fees for each service rendered that the great majority of people will not seek medical aid until suffering or disability drives them to it. The reduction of disabilities of the kind revealed by induction examinations will be accomplished only by a system of practice that favors preventive medicine. This necessitates prepayment by insurance or some other means, which must be national and universal in scope if it is to be effective.

Fee-for-service payment in competitive practice limits mobility of physicians; it is incompatible with efficient organized coöperative effort; it cannot provide for investigative activities nor for the education and continual development of young physicians; it does not promote preventive measures. But there is a far more specific argument against it. If the patient personally sustains the costs of his medical care, there is a reasonable bargaining relation between the patient who wishes to reduce expense and the physician who will profit by increasing it. If the bills are met by a third party, be it the Government, philanthropy, or a private insurance company, this bargaining relation is lost; it now becomes the common interest of patient and physician to multiply services and costs. Although most physicians and patients will not take advantage of this situation, fee-for-service payment under any public system puts a premium upon chicanery and connivance. It places unscrupulous patients and physicians at an advantage and compels decent members of the profession to assume the unpleasant roles of censors.

Although insistence that members of the medical staff in hospitals be paid by salary sounds radical, it is really only decent. Hospitals are non-profit institutions, financed by public funds. Nevertheless, physicians and surgeons are permitted under the fee-for-service system to use these facilities for their private patients for personal profit, without limitation. In no other walk of life would such a practice be tolerated. It is justified on the plea that these doctors treat other patients gratuitously. This justification will be abolished if a system of public medical care is established.

The fuller enjoyment of free choice of physician would not benefit society unless free choice meant intelligent choice, which it obviously cannot do so long as patients have no adequate criteria to guide their choice. Even the leaders of organized medicine, the most ardent advocates of free choice, are unwilling that it be extended to include unorthodox practitioners. State licensure limits free choice. Hospital privileges and specialty boards limit free choice. In the best clinics and certain hospitals, e.g., the Mayo Clinic, free choice is practically eliminated. These limitations are established to assure quality of service. It will probably be impossible to prevent certain people from wasting their money on charlatans and shoddy medicine. To abet these indulgences is bad public policy. Certainly no one should be allowed to waste public or trust funds on such indulgences. If the Government or any other body is to meet the costs of medical care, it must have the right to establish standards of qualification and to share in the selection of those who will participate in the program. The medical profession should not contest this right, but should see that it is exercised in no niggardly spirit that would cheapen medicine, but to improve the quality of medical care.

In order, then, that medicine may be mobile, productive and preventive, it should be centered about hospitals in an organized manner. If it is to function for the population as a whole it must be supported by a public program, financed by Federal taxation, with or without supplementary compulsory insurance. But the full benefits of no program can be realized unless certain principles are regarded. The fee-for-service method of payment is incompatible with any public system of medical care. A per capita method of payment, like the British panel system, may provide for services of general practitioners; only salaries are adapted to the payment of physicians engaged in coöperative efforts in hospitals or medical centers. However desirable it may be to decentralize administration, general policies and principles, especially those dealing with standards of quali-

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MEDICINE WILL CONTINUE TO PROGRESS*

JOHN H. FITZGIBBON, M.D.
Chairman, Council on Medical Service and Public Relations, American Medical Association

UPON receiving the invitation to participate in this discussion, I was struck by the seriousness of the task and reminded of the story of a windstorm in one of the Central States where windstorms sometimes reach undue proportions both as to velocity and duration. Any similarity between this and other windstorms is of course purely coincidental.

A farmer, his wife and the hired man had sought refuge in the farmhouse where they were watching the effects of the storm through the kitchen window. The farmer's wife, a highly nervous individual, after seeing the hen-house overturned by a sudden gust, fell upon her knees and began to pray aloud. "Oh Father!" she exclaimed, "Send Thy Son to aid us in our hour of distress." Whereupon another burst of wind carried away the remains of the haystack and rocked the house. The farmer then fell upon his knees crying, "Oh Father! Please send Thy Son to help us in our peril." The reply was increased violence of the storm. The house shook, the windows rattled, the wash-tub was blown from the back porch, and bricks fell crashing from the chimney. The hired man, weak with fright, then fell upon his knees beside the others and cried, "Oh Father! Come Thyself. This is no boy's job."

With full realization that this is no boy's job, I accepted the invitation to appear here, not because my crystal ball has provided the answer to the problem of the future of medicine, but because I wished to hear the opinions of others participating in this discussion and to leave with you my own ideas of what medical men as individuals and medical organizations, as spokesmen for the medical profession, can do to influence the future of medicine. I wish also to make suggestions along legislative lines.

Although speaking as Chairman of the Council on Medical Service and Public Relations of the American Medical Association, my opinions are my own and the result of my medical background and experience. In interpreting the expressed opinions of any speaker, one must always take into consideration his background. Differences of opinion are usually based upon differences of experience and environment, for no man can escape the influence of either upon his reason and emotions, particularly upon his emotions. Like most of you, and like most of the men holding office in the American Medical Association, I am a private practitioner of medicine and hope to remain so, because I believe that the best interest of the patient is served by the private practitioner. For many years I have been a part-time teacher in the University of Oregon Medical School. Teaching, therefore, is an important part of my life. An interest in clinical research and the future of medical education stems from this activity and causes no small concern in view of wartime effects upon medical education. The position of Consultant to the United States Veterans Administration has given me an opportunity to participate in government medicine for many years, and to evaluate its advantages and disadvantages, as well as to anticipate some of the problems connected with the medical care of returning veterans of the present War. Furthermore, I have thereby seen the advantage to a government institution of the coöperation of local medical men.

Like all of you, I respect and support the United States Public Health Service for its outstanding success in matters within its field. Although I hold a commission in the inactive reserve of the United States Public Health Service in connection with the recently developed base hospital program, that commission so far has been an expression of willingness to serve in the national emergency rather than an evidence of extensive experience in matters of public health, for my public health experience has been limited to an interest in community affairs and service on local committees. This local experience, however, has shown me the possibilities and advantages of friendly and constructive coöperation between medical organizations and community leaders and officials.

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I shall quote statements of the House of Delegates of the American Medical Association. These, too, are my own opinions and not something handed down by an impersonal organization, for, like the delegate from your own Society and all other component groups of the American Medical Association, including representatives of the Army, the Navy and the Public Health Service, as a member of the House of Delegates, I had a part in these actions and therefore feel my share of responsibility for them.

In discussing the future of medicine, one must bear in mind the fact that, like all other problems of human relations, there is no solution that will be entirely satisfactory to all concerned, and no single solution to the diversified problems of various communities. The medical profession must continue to make its decisions in regard to future methods of medical care upon the basis of the best interest and welfare of the patient. We can be sure that continued provision of high type medical service, regardless of changing economic arrangements, will react to the best interest of the medical profession as well as the patient.

I am not pessimistic about the future of medicine, for I believe in the sincerity and unselfishness of the medical profession and their adaptability to any situation. Medicine has progressed under many varying conditions throughout the ages and will continue to progress throughout ages to come. Nations may rise and fall, but the medical profession will maintain continuity from generation to generation, adapting itself to changing conditions. We must regard ourselves not as individuals working for our own private ends and interests, but rather as a link between the past and the future of medicine, for it is only through us as individual practitioners and teachers that medical knowledge and experience may be transmitted. It is our responsibility to preserve medical knowledge, to add to it, to apply the benefits to our own generation and to transmit them to future generations. Physicians cannot be made overnight or by short cuts, and the quality of medical service must not be permitted to deteriorate regardless of expediency.

Our natural reluctance to discard time-tried and highly successful methods of practice for methods of questionable merit has been interpreted by some of our critics as protection of a so-called "vested interest." If we have a "vested interest" to protect, I fail to see it, for surely, as individuals, we have little to lose or gain of a material nature regardless of changes in methods of distributing medical service. The practice of medicine will always be a respectable occupation, and anyone willing to work can always make a living in medical practice, provided he has the medical ability.

Those who begin the study of medicine with the profit motive are rare exceptions and usually they do not complete the course. It should be apparent to all that equal time and effort devoted to almost any other occupation would be more profitable. The qualities that make a good physician are only partly acquired by training. No amount of training will compensate for lack of native ability and love of the science and art of medicine. Very few physicians retire except on account of disability, and nearly all die "on the job" because of interest in their work. Many older physicians who should have retired because of disabilities are carrying on during the war emergency and many have died prematurely because of the excessive load of work. Does this sound like protecting a vested interest?

We all know many disabled colleagues who because of a sense of responsibility and duty are carrying the heavy burden of practice and teaching, plus volunteer service to government agencies and charitable organizations, with the full knowledge that they are shortening their own lives. These men are just as surely war casualties as if they were casualties upon the field of battle. Are they protecting a vested interest?

Many physicians beyond ordinary military age have left their practices and given up years of their lives in military service. Certainly they have no vested interest. The remarkable response of younger men to the call to service refutes all insinuations of a selfish motive.

If we have any interest to protect other than that of our patients, it is our heritage of American medicine, which is the best in the world today, and which we take pride in maintaining at its high level, while at the same time recognizing and admitting its inadequacies. Our responsibility as physicians is to wholeheartedly participate as individuals and organizations in the solution of the various problems of medical care. We can escape neither the responsibilities of ordinary citizenship nor those of medical citizenship which are far greater.

As medical citizens it is our responsibility to make available to all interested agencies our highly specialized knowledge and experience in the care of the sick and to participate as individuals in medical society efforts to solve local and national problems. I have no time for the complaints and criticisms of those who are too proud, too indifferent, too selfish, or too lazy to contribute their time and effort to a solution of medical problems. The individual physician has a responsibility which he cannot dodge and which he should not pass on to others who are more willing to carry the burden. If he does selfishly avoid responsibility in his local society, he should certainly hesitate to criticize the efforts of his fellows who are attempting to solve problems which he has avoided. The health of the people of this country is the concern of every individual physician regardless of location or type of practice, and the solution of problems of medical care is a responsibility that cannot be ignored either individually or collectively.

There has been at times a tendency for some local societies to pass responsibility to state and national organizations rather than to solve their own problems. It must be remembered that the American Medical Association is a federation of local societies and that there is no desire or intention to interfere locally, but a definite willingness to aid local groups in every possible way. Local problems for the most part need local solutions. The great weakness of plans for federal control of medical practice is that a highly personal and individual matter like medical care loses a great deal of its value when administered by remote control. Good medical care can never be anything but a very personal affair.

The medical profession is cognizant of the evil effects upon a community and upon a nation of ill health, poor housing, malnutrition, congestion, economic insecurity, unemployment, lack of cultural development, intolerance and moral imperfection. Correction of all these evils is our responsibility as citizens, but the solution of health problems is our own special responsibility as medical citizens.

We have an obligation of medical citizenship to inform our public servants, who otherwise would not have the knowledge to guide them in carrying out their duties in regard to medical problems requiring legislative action. Before attempting to inform others, however, it behooves us to inform ourselves. Sound proposals cannot be based on prejudice or emotional reactions. We must face facts, after making certain they are facts, make sound studies, and devote to these problems the same passion for thoroughness that characterizes our clinical work. Solutions offered for medical economic problems must not be of an "appeasement" type designed to ease the pressure of socialistic groups who wish to change medical practice as part of a system of national socialism, but must be based solely on good medical care. The objective of the medical profession of this country as stated in the platform of the American Medical Association is "Availability of medical care of a high quality to every person in the United States." All plans and proposals, whether national or local, should be directed toward that objective. Availability of medical care is not the entire solution. The public must be persuaded to utilize the services made available.

Studies of local health needs are being made by many county and state medical societies. Surveys of public opinion both local and national are shedding light upon our problems and emphasizing the fact that health problems are often very complex. The medical profession is not responsible for poor housing, poor nutrition, inadequate clothing and low income in any community. On the other hand, poor economic conditions are responsible for many of our health problems, and in a great many cases the solution is economic rather than medical.

Perhaps in our devotion to medical practice and care of the individual we have overlooked to some extent the broader field of social problems. Perhaps we have been willing to carry the burden of charity as a personal man-to-man problem while others more "socially conscious" have transformed charity to an impersonal matter and altered our vocabulary by the science of semantics and the substitution of pleasant words for those that have fallen into social disrepute. Thus "charity" has been replaced by "welfare," and disguised charity in many cases is called "social security." The poor have become the "underprivileged" and "security" has become our watchword. Hitch-hiking is the national sport and in great degree dominates our social thinking. With the war-time increase in employment and wages there has certainly been a marked drop in the number of "underprivileged" as shown by attendance at medical school clinics and teaching hospitals. Perhaps this is an indication that people really prefer a private physician to one giving service through an institution, even though, in many instances, it may be the same physician.

Surely no thinking person will oppose constructive social legislation and least of all the medical profession. Many times, however, it is difficult to determine where constructive legislation ends and destructive paternalism begins, especially when administered by an impersonal and entrenched bureaucracy.

Experience in many communities has proved that there can be friendly and efficient coöperation between professional organizations and local governmental agencies with resulting benefit to the population. This same coöperation on a national basis will result in mutual understanding and benefit. Such coöperation cannot exist, however, without mutual trust and respect and a desire to reach sound solutions rather than to "put over" preconceived plans or to introduce compulsion. When political manipulation and determination to force coöperation of the medical profession enter into a plan, there can be no constructive discussion. The future of medicine will be affected, therefore, by the attitude of Government toward the medical profession. If constructive discussions can be held by responsible parties, national problems should be little more difficult of solution than local problems.

It is surely not best for the field of medical care to become a battleground for antagonistic minorities attempting to find a solution to a problem that has no single solution but is extremely complex and complicated by many factors of economics and environment.

The medical profession of this country has more than once offered its wholehearted aid and all of its facilities for the solution of problems of health, but too often the only opportunity offered has been a hasty appearance before an overworked congressional committee in a battle of pressure groups. The people of this country deserve better consideration of their health problems.

As a result of such technics there has been a tendency for members of the profession to develop "delusions of persecution" and a feeling that certain elements within our Government do not wish sound advice and professional help in health matters and that the attempt to extend socialization of medicine is merely one phase of a plan to introduce federal control of all human activities. There is a strong suspicion that it is the purpose of some of our public servants to change our form of government. Under the term "public servants" one must include those acquired as well as those elected or appointed, for apparently some of the barnacles upon the Ship of State have influenced the course to a profound degree.

If federal health legislation is needed, why should it not develop as the result of sincere deliberation and conference between all parties concerned rather than as the attempt of an inside pressure group to make profound changes in a field in which they are not too well informed? As far as I know, no medical man has so far admitted being consulted in the preparation of the medical section of the Wagner-Murray-Dingell bill. Can the medical profession or any other informed group feel confidence in the sincerity of those behind such a move? The desire of the medical profession to aid in solving medical-social problems is no less sincere than our desire to aid in the solution of problems of medical science, and surely there is no group more directly concerned with human welfare.

In 1943 the House of Delegates of the American Medical Association created the Council on Medical Service and Public Relations. The functions and activities of the Council have been published and widely discussed.

The Council does not intend to play a defensive game but to actively promote the objective of the American Medical Association as reaffirmed by the House of Delegates in June, 1944, namely: "Availability of medical care of a high quality to every person in the United States."

Availability of good medical care is not the responsibility of the medical and allied professions alone. Attainment of this objective will require the wholehearted coöperation and untiring efforts of many individuals and groups, including Government, industry, labor, hospital groups, insurance organizations, and many others.

I have read with interest and profit testimony presented before the various congressional committees during recent years and particularly the record of the Senate Subcommittee on Wartime Health and Education of which Senator Claude Pepper is Chairman. Much valuable information is contained in these congressional records, and many constructive suggestions have been made by persons whose sincerity cannot be doubted. It appears that all concerned are agreed upon one thing and that is the objective of the American Medical Association as previously stated, "Availability of medical care of a high quality to every person in the United States." That at least is a start, but I believe that there are many other things that we can agree upon and upon which the medical profession is already agreed. Any plan to be successful will require the wholehearted support of the physicians of this country, and any plan not gaining the enthusiastic support of a vast majority of the medical profession is doomed to failure before it begins. Let us therefore consider the possibilities.

For many years, the medical profession of this country has urged "the establishment of an agency of federal government under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy." Since 1875 the American Medical Association has urged the establishment of this agency "in the interest of efficiency, the avoidance of duplication and a saving of vast sums of money." Surely the health of the people of this country is of sufficient importance to justify this step. The creation of such an agency with a secretary of cabinet rank and a commission including an adequate number of competent, experienced physicians would do more to accomplish "unity of purpose and execution" than anything I can think of. Is there any logical reason why this change should not be consummated? An agency of this kind, devoting its entire energies to one large problem, should bring unity out of chaos and would certainly be the first step in a constructive program. Why has this reorganization of federal health functions been delayed? After advocating this measure for 69 years, I believe that it is now time for the medical profession to do something about it.

I believe that there are other planks in the platform of the American Medical Association upon which reasonable agreement can be reached. Let us review them briefly:

> "A. In the extension of medical services to all people, the utmost utilization of qualified medical and hospital facilities already established."

Can anyone logically disagree with that proposal?

> "B. The continued development of private practice of medicine, subject to such changes as may be necessary to maintain the quality of medical services and to increase their availability, including the development and extension of voluntary hospital insurance and voluntary medical insurance."

Upon this plank, I recognize that there will be minority disagreement by those advocating complete socialization and Government control of medicine and allied activities. Those who believe in compulsion have their arguments which I am willing to listen to, but as a private practitioner and part-time teacher, I cannot agree with them. I cannot agree that the private practitioner has been relegated to the position of distributor of medical service or that the full-time salaried man is alone God's gift to humanity. No doubt much can be said on both sides, but further argument merely adds to the medical windstorm.

Let us continue with the platform of the American Medical Association:

> "C. Expansion of public health and medical services consistent with the American system of democracy."

We should develop our own system rather than import such methods as compulsory sickness insurance and other European plans which tend to intensify the dependence of the individual upon the State.

> "D. The allotment of such funds as the Congress may make available to any state in actual need for the prevention of disease. the promotion of health and care of the sick on proof of such need."

Is there anything wrong with that proposal?

> "E. The principle that the care of the public health and the provision of medical service to the sick is primarily a local responsibility.
>
> "F. The development of a mechanism for meeting the needs of expansion of preventive medical services with local determination of needs and local control of administration.
>
> "G. The extension of medical care for the indigent and medically indigent with local determination of needs and local control of administration."

I believe that reasonable agreement will follow unprejudiced study of these planks and that they deserve serious consideration by all interested in medical planning.

The most important plank from the standpoint of early federal action, however, is the one first referred to as our objective since 1875, "the establishment of an agency of federal govern-

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A CHALLENGE TO DOCTORS*

VICE ADMIRAL ROSS T McINTIRE
Surgeon General of the United States Navy

I WISH first of all to pay tribute to the Reserves who are serving in the Medical Corps of the armed forces. These doctors will have been on active duty from two to five years before the War is ended. We have the responsibility of returning these men to civilian life professionally fit and able to resume or embark upon private practice with all advantages, since many thousands of the medical officers now in uniform have never engaged in the private practice of medicine. The Navy is keenly aware of its responsibility to these young men, many of whom have started their medical careers from abbreviated courses and internships and, in some instances, without residencies. The ranks of older men in medicine are being thinned out too fast by overwork and advancing years.

Even the best of plans often go awry or have to be altered before they are executed, but if the profession of medicine in the United States will lay serious plans and follow them through, there need be no fear of irresponsible laymen taking over the proper function of organized medicine. The Medical Department of the Navy began its planning for war back in the fall of 1939, and, in the case of civilian medicine, it is not too soon for its members to make sound plans for proper distribution of medical services. Plans are vital and necessary but are meaningful only if they are put into practice. During the past year we have talked and talked, but actually we have done nothing in this matter of distribution of medical care.

It is up to doctors of medicine to perfect sound plans and carry them through. If we do we will not have to worry about socialized medicine.

The Nation will face tremendous postwar problems, entailed by the responsibility to care for our veterans and the shifting of population. Wages are high today, but they will not continue so indefinitely. The time will come again when men will have to hunt jobs and people will be without money, homes, or a place to go. You will be responsible for their medical care.

I am greatly concerned that concrete plans have not yet been made to insure medical care for all after the War, but I heartily commend the effort which is being made in the District of Columbia toward solution of the local problem.

We recognize the necessity of returning to civilian life the teachers and instructors who are now in uniform. These are the people who have played such a large part in developing and improving preventive medicine while they have been in the Navy. During the last two and a half years the accomplishments of these and our other Reserves have been outstanding. Civilian medicine, with the aid of these people, can surely produce the results for our civilian population which have been achieved in the Army and Navy in maintaining the health of personnel.

I do not believe for one minute that the Government should take over the hospitals; however, the Government does have a responsibility to exercise over the medical care of its citizens. There is some way to do this without destroying or disturbing the private practice of medicine. The establishing of clinics and laboratories would go far toward protecting the Nation's health and helping obviate the difficulty encountered in the last few years in ob-

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* Abstract of an address, a part of a Panel Discussion on the Future of Medicine, which was presented at the Sixteenth Annual Scientific Assembly of the Society, October 7, 1944.

MEDICINE IN INDUSTRY*

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THE health status of industrial workers is of prime importance. A fundamental factor in industrial progress, it is one variable about which something can be done. Steps taken to insure the health and well-being of the individual worker is therefore a recognized obligation of industry.

Essentials of an industrial medical service are:

1. Preëmployment and periodic health examinations.
2. Emergency medical and surgical service.
3. Preventive medical service including sanitary control in order to eliminate air and water pollutions; excessive heat, cold and dampness; and defective illumination and noises. In the control of communicable or transmissible diseases, it is desirable that medical departments in industry and local health departments cooperate.
4. Educational program emphasizing the maintenance of health through personal hygiene, sanitation and safety practices.

These, then, are the fundamentals which should be included in an industrial medical service. There is no doubt that the type of service given industrial workers will be expanded beyond the essentials here set forth, for revolutionary social changes are already visible on the horizon. For example, the trend is toward providing medical hospital and nursing care not only to workers but to their dependents.

Observation leads one to the following conclusions in regard to industrial medicine:

1. Although splendid progress has been made, one can be certain that the time is not far distant when an industry without a full-time, part-time or consultant medical personnel will be looked upon as an oddity.

2. Organized medicine has awakened to the great opportunity and responsibility confronting it in this field. The American Medical Association's Council on Industrial Health has done much to advance the standards of medical industrial practice and its recognition as a specialty. It has also directed its efforts toward improving the quality of the medical service given, thereby attracting many well qualified physicians to this field.

3. The United States Public Health Service has made important contributions to industrial medicine. For example, it has done a tremendous amount of research work in chemistry, physiology, physics and sanitation. It has also developed a trained personnel and is prepared to provide physicians to carry on temporarily in an industry. This has proved a boon in a period of business expansion, shifting populations and increasing hazards requiring enlarged specialized medical services to maintain manpower.

4. Some twelve million American men and women are now with the armed forces. Their health is entrusted, for the most part, to physicians from civil life. The splendid organization which has made this medical service possible will have its repercussions in the postwar period and will motivate our social and economic thinking and planning. Particularly will this be true in industry.

Scientific research has been prolific in developing medical and surgical technics, discovering remedial agents and standardizing laboratory measures and facilities. Their availability has placed a heavy responsibility upon the medical profession. Professional interests are not without their dark side. But misunderstandings, jealousies and prejudicial concepts which have arisen have been largely mitigated.

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* An abstract of an address, a part of a Panel Discussion on the Future of Medicine, which was presented at the Sixteenth Annual Scientific Assembly of the Society, October 7, 1944.

The full-time physician in industry now moves at ease in all professional gatherings. He is ethical, courteous, intelligent and respected by his fellow colleagues. Efforts are now being made to credit the physician thus engaged with acknowledged authority and prerogatives.

Another trend is observed in our medical school curricula which now include undergraduate and postgraduate training in industrial health.

Returning again to the social aspects of industrial medicine, its objective is to furnish adequate health care and to cope with conditions in industry responsible for disabilities. In addition to these higher motives, of course, there are the mundane reasons such as absenteeism, decreased production and insurance premiums.

The attitude of labor has been most encouraging. As you know, organized labor is demanding adequate health care for all workers. An alternative to a Government system is a program administered at the expense of industry. There need be no federalization or socialization of medicine unless industry is so controlled. Free enterprise is, of course, not compatible with such control. Therefore, in planning for the future, industry should be held entirely responsible for all factors which may contribute to the physical and mental handicaps of its workers.

Mention might be made here of the fact that in the era of plastics, synthetics and chemicals, innocent exposure to deleterious substances is the responsibility of management. The same is true of avoidable injuries from mechanical devices. In this respect industrial management is cognizant of two things:

1. The number of deleterious substances is increasing hazards to workers. And, of course, spurious claims are correspondingly more numerous.

2. There is no reason to anticipate recession in litigation involving disabilities from these causes.

What can be done about this situation? The answer is to organize an industrial medical personnel with the best and ablest physicians available. All other things being equal, the worker will have better prospects of recovering from occupational diseases and accidents. There should be no place in industry for a mediocre medical staff. If this can be realized, the examining physicians who stimulate litigation will lose their place in the sun.

Industry has been money-conscious in determining the remuneration for full-time physicians and consultants. The time will soon come when it will, I am sure, take a different attitude. Industry can readily afford to compensate physicians adequately. If it recognizes the value of physicians' services and pays accordingly, it will attract the best men to this field.

EXPERIMENTS IN MEDICAL CARE*

NORMAN M. SCOTT, M.D., F.A.C.S.
Medical Director, Medical-Surgical Plan of New Jersey

THE most important current administrative problem facing the profession is that of the distribution of medical care. A definite demand for a solution of this problem has been expressed by labor, by industry, by public opinion and by socio-political trends.

In considering the problem as a whole it is futile to deny the existence of defects in our present methods of distribution of medical care, or to base our arguments upon the admitted fact that adequate facilities and adequate personnel are available in most areas of the country to meet the medical needs of our people. Such statements and arguments cannot be substantiated to the satisfaction of the majority of our people. There is no doubt about it—it must be accepted as a fact—the majority of American people believe that adequate medical care should be made more easily available, without incurring undue financial hardship to persons of low and modest income.

If this is to be accomplished we must break down the economic barrier which frequently exists between the profession and the person in need of medical care. If this can be accomplished by the profession on a voluntary basis it will be more acceptable to our people than will any plan based upon compulsion and administered through governmental bureaucracy.

Our program must be built within the present framework of medical practice; provide for free choice of physician and patient; free enterprise, personal initiative and dignity of the profession and individual physician; maintain our present high standards of medical care, and provide an adequate income to the profession.

We must concede that medical care of the indigent and medically indigent is a combined responsibility of the government and the profession, to be paid for by tax money; that the problem of the employed, self-supporting individual and his family is a responsibility of the individual, who must, in accordance with established customs of American democracy, arrange to provide for the welfare of himself and his family. We have reason to expect that industry, appreciating the advantages of private enterprise as compared with centralized governmental control, and appreciating the value of good health among employees, will quite generally be willing to make a contribution toward defraying costs to its employees.

If we are to retain the advantages of private enterprise and personal initiative we must also retain the basic concept of the profession of medicine as a profession of service and adjust ourselves to meet changing social concepts and needs of our people. If the spirit of private enterprise leads us to disregard, or diverts us from this basic concept, then we will subject ourselves to the dangers of federal control.

Those of us working actively on the solution of this problem through voluntary insurance plans sincerely believe that such plans are the only practical approach to its solution so far suggested. We consider our efforts as experimental, but our viewpoint is practical rather than academic. We think and speak in terms of achievement, which advances us closer to a solution and which will make secure the future welfare of medicine as a private enterprise.

Each of the following plans is sponsored by, and operated in accordance with policies approved by a component unit of organized medicine, at a local level to meet local needs. To the list might now be added the plans recently launched by the state societies of New Hampshire and Missouri. Each plan is administered with the coöperation of a non-profit voluntary hospital service plan.

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* Read at the Sixteenth Annual Scientific Assembly of the Society, October 7, 1944.

MEDICAL SERVICE PLANS COÖPERATING WITH BLUE CROSS PLANS

Name of Plan	*Persons enrolled July 1, 1944*
California Physicians' Service	98,500
Colorado Medical Service	25,417
Group Hospital Service, Delaware	27,302
Massachusetts Medical Service	33,215
Michigan Medical Service	662,906
Surgical Care Inc., Kansas City, Mo.	15,545
Medical-Surgical Plan of New Jersey	23,846
Western New York Plan, Buffalo	28,738
Community Medical Care, New York	54,685
Medical Surgical Care, Utica	26,203
Hospital Savings Assn., N. C.	48,822
Medical Service Assn., N. C.	28,300
Medical Service Assn., Pa.	15,000
Hospital Service Assn., Puerto Rico	13,935
Total	1,102,414

Time does not allow for a discussion of each plan. The majority provide surgical and obstetrical benefits for services rendered in hospital. Some, by special riders, provide for a limited number of office and home calls. Some are on a strictly indemnity basis, but the majority in some way provide for complete payment of eligible services to persons below a stated income level. The two which have had the most phenomenal growth and probably contributed most to a solution of the problem are the plans in California and Michigan.

California Physicians' Service, organized by the California Medical Association, at its inception was too idealistic and attempted to provide for a complete service including hospital, home and office care. This proved almost disastrous, largely because of the lack of automatic control over the amount of home and office care requested by subscribers. They now have several types of contracts to meet local needs of specific groups. Their surgical-obstetrical contract is on a complete service basis for service rendered in hospital to persons with incomes below $3,000, with a special rider available only to the employed person (not dependents) providing for home and office calls if the subscriber pays for the first two calls during any illness. Some such control is necessary in any plan providing for home and office care. Another contract provides for complete home, office and hospital care, including cost of hospitalization, for farm families with incomes below $2,000. Still another contract provides for complete payment for surgical and obstetrical care in hospitals to occupants of Federal Housing Units, plus care of minor cases in medical centers established in the Housing Units.

California Physicians' Service bases its fees strictly on a unit basis. The par value of their unit is $2.50. At one time the value was as low as $1.10, but with improvement of defects the value has risen to $2.25, supporting payments under their surgical-obstetrical contract of $45.00 for tonsillectomies, and $112.50 for appendectomies, fees for other services being consistent with these. One important recent change provides that the House of Delegates of the Society be the governing body of California Physicians' Service. This it is believed will produce more positive support by the rank and file of physicians. They are now enrolling at the rate of 8,000 persons per month and look forward to better experience in the future.

Michigan Medical Service has had a remarkable experience. Starting with a plan providing coverage for home, office and hospital care which proved almost financially disastrous, and which was discontinued after one year's experience, they now limit their benefits to surgical, obstetrical and certain auxiliary services rendered in hospital. A second cause of their financial difficulties was the tremendous amount of surgery needed among their enrolled groups. With complete backing of their State Society, and continued coöperation of physicians, they have restricted the enrollment of new groups and concentrated upon seasoning their existing groups and increasing their percentages of enrollment. The results from these policies have been remarkable. A year ago they were indebted $128,000 to their physicians because of the prorating of fees, in addition to a general deficit of half a million dollars. They now have eliminated their deficit, have paid their physicians the amounts deducted by proration and have a small ($70,000) reserve. Their contracts provide complete payment for eligible services rendered in hospital to individuals with incomes up to $2,000 and families with incomes up to $2,500. Fees paid physicians are exemplified by: tonsillectomy $25.00, appendectomy $75.00, other laparotomies $100.00 or more, and fees for other services consistent with these examples. It is anticipated that their contracts will soon include medical as well as surgical benefits.

PROGRAM OF THE MEDICAL SOCIETY OF NEW JERSEY

In New Jersey we consider our program as definitely experimental and evolutionary. It is an effort to solve this problem at a local level to meet local needs on a voluntary basis. It is an effort to evolve an alternative for national compulsory sickness insurance. By experimentation and evolution we pursue our objective, fully appreciating that our experimental work may require several years of sincere effort, and realizing the impossibility of evolving a program which will meet with the approval of every one and offend no one.

The Medical Society of New Jersey has organized two non-profit medical service corporations under provision of a special enabling act, through which to evolve its program. All activities of these corporations are first approved by the Society. Each member of their governing boards is nominated by the Society.

Medical Service Administration studies the needs of the indigent and medically indigent and evolves plans to meet these needs.

1. *Farm Security Administration medical plan,* sponsored by Federal Farm Security Administration, provides home and office care and health guidance to low-income farm families being rehabilitated by the Federal Government. At a subscription rate of $16.00 to $24.00 a year per family, it provides $1.50 per office call and $2.50 per home call.

This plan is of particular importance as a demonstration of how organized medicine can coöperate with the Federal Government when the need is shown.

2. *The City of Newark medical plan* provides payment for care rendered the indigent and recognized medically indigent of Newark, confined to their homes by illness. It does not include office calls. Free choice of physician is provided. Fees are $2.00 for day calls and $3.00 for calls after 8 p.m. Physicians' bills are submitted to M.S.A. and paid by M.S.A., which is in turn reimbursed by the City of Newark. We have an informal memorandum of understanding as a guide to procedure and policies, signed by proper city officials, in lieu of a formal contract. The plan is working well and to the entire satisfaction of the City, the patients and the physicians.

Medical-Surgical Plan of New Jersey is designed to meet the needs of self-supporting, employed persons. Under its present contract it provides for medical, surgical and obstetrical services rendered in general hospitals, including anesthesia, surgical assistants and consultations. Participating physicians of the plan have agreed to deem as payment in full the amounts payable by the plan for services rendered patients admitted for semi-private or ward accommodations. The subscription rate is 75 cents per month per individual contract and $2.00 per month for family contract. The fees maintained are exemplified by: first call (medical) $5.00, $3.00 for subsequent daily calls, and $1.50 for additional calls on same day; (surgical) tonsillectomy $40.00, appendectomy $100.00, other fees consistent with these examples.

Our experience up to July 31, 1944 is depicted on the following tables, which I present to acquaint you with our experience concerning some of the basic economic and actuarial factors upon which these plans are based.

MEDICAL-SURGICAL PLAN

Enrollment and income by periods

Number of Contracts	*Number of Persons*	*Persons per Contract*	*Monthly Income per Contract*	*Monthly Income per Person*
First 6 months (as of December 31, 1942)				
1,844	4,131	2.23	$1.49	$0.67
First calendar year (as of December 31, 1943)				
7,363	16,015	2.17	$1.45	$0.67
(As of July 31, 1944)				
11,158	25,227	2.19	$1.47	$0.67

Income per person is the basic income unit, particularly important if family contracts are to include all eligible dependents regardless of number. Sixty-seven cents is the yield from our subscription rate in New Jersey, where the average family of 3.8 persons is buffered in the plan by an enrollment containing 42 per cent of single contracts. Since our contracts become effective at any time during the month, it must be computed upon average total number of persons exposed rather than total number enrolled as of the last day of the month.

CLAIM EXPERIENCE—BY PERCENTAGE ENROLLED

Percentage Enrolled as of May 31, 1944	*Groups*		*Claim Cost*
	No.	*Percentage of Total*	*Per cent of Earned Income*
0–30	29	20.7	67
31–50	47	33.6	62.2
51–75	31	22.1	50.2
76–100	33	23.6	44.0
Totals.....	140	100	57.4

This shows very definitely the advantages and necessity of procuring and maintaining adequate percentages of enrollment which will produce cross sections of health in each group similar to that of the general population. It does not indicate our present claim cost, since this experience includes the periods before and after the waiting periods for obstetrical and tonsillectomy benefits. The majority of our groups have not yet passed their waiting periods.

By occupation, the groups with highest claim costs are school teachers and municipal, county and civil service employees; restaurant workers; and insurance agents. Several of these groups, during their first year, had claim costs of over 200 per cent of income from their groups.

PROGRESSIVE INCREASE IN CLAIM COST AND ADMISSION RATES

Period	*Claim Cost Percentage of Income*	*Admission Rate per 1000*	*Average Cost*
Jan. 1–July 31, 1943......	53	58	$65.22
Jan. 1–July 31, 1944......	69.7	86	59.59
July 1944................	75	104	58.00

There is a progressive rise in the admission rate and claim costs as we assume responsibility for tonsillectomy and obstetrical care. Claim costs are higher during the summer months because of increase in tonsillectomies and elective gynecology. In March 1944 we paid for 8 tonsillectomies, in July we paid for 68.

The admission rate to general hospitals among the general population of New Jersey is 77 per 1,000 per year. The difference between this normal rate and our rate is due to two factors: (1) low percentage of enrollment, which gives us adverse selection of health risks and which would be altered only if we were to procure 100 per cent enrollment; and (2) the admission to hospital from among our subscribing groups of a certain number of persons who would not otherwise have entered hospital because of costs. Which is the most important factor we do not know, but from personal experiences we know that a considerable number of these additional admissions involve persons who would otherwise not have entered hospital for treatment because of costs.

TYPES OF CASES

	Jan.–July 1943 per cent	*Jan.–July 1944 per cent*	*July 1944 per cent*
Surgical.....................	77	70	73
Medical.....................	21	16	12
Obstetrical..................	1	12	12
Medical-Surgical............	1	2	3

CHOICE OF PHYSICIAN AND HOSPITAL ACCOMMODATION

	per cent	*per cent*	*per cent*
Participating Physician	93	92	93
Semi-private	82	79	78
Private	15	14	15
Ward	3	7	7

OPERATING COSTS—BY PERIODS

First Six Months

M.S.P. assumed 39.2 per cent of Earned Income
H.S.P. charge 12 per cent ” ” ”
——
51.2 per cent

First Calendar Year—1943

M.S.P. assumed 11.9 per cent of Earned Income
H.S.P. charge 12 per cent ” ” ”
——
23.9 per cent

Current—Jan.-June 1944

M.S.P. assumed 7 per cent of Earned Income
H.S.P. charge 12 per cent ” ” ”
——
19 per cent ” ” ”

Month of July 1944

17.7 per cent of Earned Income

Medical-Surgical Plan has paid all administrative costs from earned income. Cost of equipment, printing and publicity with a small enrollment account for the high costs during the first six months. Reduction in percentage of operating costs parallels the increase in enrollment and income. Our contract is sold through the enrollment department of Hospital Service Plan of New Jersey. In addition, Hospital Service Plan does our billing to subscribers, collections, and general accounting. The actual cost to Hospital Service Plan is very difficult to determine. The charge for their work is nominal and will be reduced as our volume increases. Medical-Surgical Plan handles all medical phases of the work, including payment of claims, relationship between the plan and the physician, and matters referred to the plan involving relations between the physician and patient. Without such assistance from Hospital Service Plan we could not have paid our operating expenses from our earned income.

The initial grant of $5,000 from The Medical Society of New Jersey to cover our initial costs is still intact as part of our reserves.

FINANCIAL SUMMARY

Jan. 1—July 31, 1944

	Accumulative	*Month of July 1944*
Subscription Income	$93,619.32 (100%)	$16,783.99 (100%)
Claims Accrued	65,253.25 (69.7%)	12,586.00 (75%)
Operating Costs	17,787.56 (19%)	2,512.98 (17.7%)
Reserve	10,578.51 (11.3%)	1,233.21 (7.3%)
Reserve (Previous Year)	12,201.35	
Total Reserve	22,779.86	

INCOME TO PROFESSION*

Assuming population of New Jersey was enrolled as under Wagner Bill Plan and 4,500 physicians in practice.

Population		*Monthly Income per Person*	*Monthly Income of Plan*	*Per Physican per Month*	*Per Physican per Year*
4 million	×	$0.67	$2,680,000	$595.00	$7,140.00

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* Less administrative cost.

This compares with the estimate under the Wagner Bill of $5,000 per physician for complete service rendered in hospital, home and office.

I must take time for a few words on two other important phases, (1) the inclusion of benefits for medical cases and (2) the amounts paid to physicians.

One unique feature of our plan is that we provide benefits for medical care as well as for surgical and obstetrical care. We do this because we feel that adequate standards of medical care cannot be maintained, or the needs of our patients be met, except by a complete service. This inclusion of medical care was looked upon as particularly dangerous from an actuarial standpoint and as having less actuarial basis than surgical services. We anticipated that medical care might constitute 25 per cent of

(*Continued on page 480*)

President's Page

"IS THERE A BUSINESS MEETING TONIGHT?"

Although I am stationed some distance from Washington, I try to keep in close touch with Medical Society affairs. Of course, I correspond with the Society's officers and a few physicians whom I know personally. Once a month I attend a meeting of the Executive Board. From all of these sources I receive information which keeps me informed in regard to the latest developments on the home front and it is to one of these I wish to devote this month's President's Page.

On October 25 the Society held its first scientific meeting of the organization year. The program, I was told, was an exceptionally good one. Because so many months had elapsed since the Society last met, it was essential that business be transacted before the scientific program. There were those who felt that business of any sort at this meeting was objectionable. One of the reasons advanced was that it was not courteous to an out-of-town speaker. Another was that many of those who attend scientific meetings are not interested in the Society's business affairs.

It is not with any thought of being critical of those who object to business being transacted at scientific meetings that I write this message. In fact, I quite sympathize with their feelings and I am going to request that business sessions be eliminated from scientific sessions wherever possible. But I do want to say something about regular business meetings.

A week following the above meeting, the first session devoted entirely to business of the Society was held. There are only three such meetings a year and they are held in November, March and May. These meetings, except for the Annual Business Meeting in May, have been approached with trepidation by the officers for the reason that the attendance is very small. The November meeting this year was no exception.

An immense amount of work goes into preparing reports for the Society so that the membership will know what is going on. Frankly, it hasn't been worth the effort. In fact, the Board has now recommended that the business meetings be limited to one called meeting a year, the Annual Business Meeting, at which policies will be formulated for the year and special meetings which will be called when necessary. This is the practice of most state and county medical societies throughout the country.

I have mentioned before that the "business" of our Society is important and that doctors should feel obligated to inform themselves in regard to matters pertaining to the social and economic aspects of medicine. Unless they do, and support progressive leadership in the field of health, they must be prepared to accept what comes their way.

Editorials

PATIENCE CALLED FOR THIS CHRISTMAS

Editors are pretty much the same in one respect. When they have finished writing an article or an editorial they are through with it. In fact, most of them never read their literary efforts once they are in print.

In preparing this editorial, the writer's curiosity got the best of him. He looked up the Medical Annals for December, 1943 to refresh his memory on what he had to say about Christmas that year. Here it is in part:

"Our far-flung battle lines nearly encircle the globe. In every clime and under all sorts of conditions, our boys are carrying the fight to the enemy. Modern war is devastating. Monstrous machines of war are bringing suffering, extinction and desolation to peoples all over the earth. And yet at Christmas time a gentle spirit will pervade most of the world even though nations are fighting to the death for survival. This will be especially true wherever our boys are stationed. For Christmas will bring them memories of the gayest and happiest season of the year."

This statement bears repetition for it applies as much this year as last. However, there is promise of better days in the air this Christmas for it is apparent that our forces are well on the road to victory. In the course of the past year, most of Italy has fallen to the Allies. France has been restored to its people and on both eastern and western fronts the Allies are now on German soil. There will, of course, be hard fighting on the road to Berlin but we are much closer our goal than we were a year ago. There are still many major actions to be fought in the Pacific. Months or even years may be required before we enter Tokyo and our victory is complete.

So this Christmas we should resolve to be patient. Perhaps victory is much closer than we think. But let us not get into a frame of mind that the war is over. That is unfair to our loved ones overseas and is conducive to the slackening of our efforts. For them it is not over until the last shot is fired.

ORGANIZATION OF DIABETIC ASSOCIATION CONTEMPLATED

The Medical Society's Executive Board and the Committee on Public Health recently took another important step forward in the field of public education and preventive medicine when they adopted recommendations sent to them by a group of physicians. In October of this year, these physicians addressed the Board seeking approval of an educational and preventive medicine program for the diabetic patient in the city of Washington.

It is proposed that statistics from all possible sources about the diabetics in the Nation's Capital be gathered as a prelude to the formation of a diabetic association. The object of the proposed association is the education of the diabetic patient, physicians, nurses, dietitians and others interested in diabetes. Such organizations have been established elsewhere and it is felt by those interested in this problem that it will stimulate the application of better methods of treating diabetes and the prevention of its complications. In other communities, results have been most gratifying to the diabetic individual, who has received far better care than the individual physician alone can give. A more general knowledge of the means available for the control of diabetes will undoubtedly result in a reduction of time lost from work.

When the statistical data are compiled, digested and arranged for practical uses, announcement will be made concerning the formation of the proposed diabetic association, and it is hoped that every physician interested in the problem as well as their patients, nurses, dietitians and others will join in the promotion of its objectives.

The Executive Board and Committee on Public Health should be congratulated for giving their approval to the proposed study and the organization of a diabetic association. With the Society backing such endeavors, the profession is taking a forward-looking attitude in the field of medicine.

In and Out of Focus

BY THE OBSERVER

Free Enterprise and Medical Care

"In one very essential field—namely, organization—medicine has not kept pace with its own scientific advancement or with the social and economic changes in the body politic." So states Dr. Joseph W. Mountin, Medical Director of the United States Public Health Service, in the October 27 issue of *Public Health Reports.*

Dr. Mountin is widely known for his liberal views on medical care. Whether one agrees with him or not, one must credit him with being sincere, well informed and realistic. He writes:

> "Despite successful demonstration of group practice and prepayment plans, it would appear that the prevailing opinion within the profession sustains the view that the most desirable arrangement is for each physician to operate as a unit and be paid directly by the patient on the basis of fees for service rendered. These principles, literally interpreted and applied, would preclude the introduction of schemes of organization that have operated so successfully in fields of commerce and industry; they would not permit the spreading of risk through the insurance technique; the consuming public would not have any voice in management; and there could be little or no participation on the part of government. Happily this extreme position does not prevail in actual practice.
>
> "Experience has demonstrated that such rigid principles cannot be applied to the whole range of medical service—for reasons that are more or less obvious. Even in prosperous times a substantial proportion of the population is not self-supporting, and a much larger group is precipitated into the so-called medically indigent class by the occurrence of even moderately severe illness. Such conditions as mental disease, tuberculosis, and chronic invalidism often require prolonged periods of institutional care. This of itself is very expensive; moreover, these disorders almost invariably have a permanent depressing effect on income. In still another class are the communicable diseases which require special treatment facilities and the use of both law-enforcement and health-education measures. For want of a better term, this broad and variable category of disorders is sometimes referred to as 'unprofitable illness,' largely because the remedial measures indicated are not adapted to application by private enterprise. Even nonprofit agencies, many of which derive a substantial part of their incomes from endowments and gifts, have not been able to operate extensively in this field. Hence, the job falls to government and the costs are borne out of taxes.
>
> "Most of the current controversy centers around that group of human ailments often spoken of as 'profitable illness.' In the main, these are the short-term illnesses experienced by self-sustaining members of the population. The patient is expected to pay for the care he receives either out of pocket or on credit, coupled perhaps with some adjustment of fees. Up until quite

recently, in this country, medical care for profitable illnesses had somewhat the social status of shoes, clothing, groceries or recreation. That is, it represented a need which should be recognized by the individual and be satisfied according to his wishes within the limit of his purchasing capacity. With this arrangement there could be no disagreement, provided medical care had the same essential characteristics as the articles mentioned and occupied a similar position in respect to human necessity. But few persons would claim the complete identity of medical care with shoes, much less their similarity.

"The head of the household can estimate in advance, with a high degree of accuracy, his expenditures for shoes, clothing, groceries, and recreation. In fact, these costs vary little from day to day or month to month, except as the price index fluctuates. By substitution and denial, a family head may adjust expenditures for these commodities without seriously affecting the health or happiness of his household. But the family head is not in a position to meet his illness problems so easily. One family group may live together for several years and experience no serious illness, another may pass from one medical disaster into another, while still a third may have the so-called average illness experience. For an ensuing period the illness patterns of these families may continue unchanged or they may be completely reversed. No one can predict what the illness experience of any family, or of any of its members, will be even during the course of a day. Since treatment must be adapted both to the character of the illness and to the reactions of the patient, advance estimates on costs likewise are not within the range of calculation; hence, budgeting for illness by the individual is not feasible.

"Under a system where receipt of service is dependent on ability to pay for it, one naturally expects that service will be apportioned accordingly. Despite all assertions to the contrary, that is what actually occurs. Physicians are known to give generously of their time in ministering to the sick of limited means, but this gratuitous service falls far short of effecting complete equalization in receipt of care among persons of all income groups. A large part of the difficulty arises from the fact that persons in the lower economic brackets have more illness than do those in better financial circumstances. Furthermore, a combination of lowered vitality and a tendency to delay seeking care seems to result in unduly severe illness among the poor. Thus more prolonged and expensive forms of treatment than otherwise would be indicated are necessary."

"Since economic factors are largely responsible for the present concentration of professional and hospital resources in centers of population and wealth, there is reason to suppose that payments for service out of a pooled fund derived from taxation or insurance, would do much to reverse current trends. To meet the special needs of low-income and sparsely settled areas, it will probably be necessary also to make direct grants for the construction and operation of hospitals and to supplement the income of professional personnel.

"In general it may be said that the amount and character of medical service the people receive are determined by three factors: (1) their financial resources, (2) the availability of properly trained personnel, and (3) the presence of hospitals and related facilities. During different periods in our recurring economic cycles and in different parts of the country, one or the other of these hurdles may be the most prominent obstacle. At no time in the experience of this country have the forces of free enterprise, supplemented by charity, brought about a combination of circumstances under which good medical care is available to everyone. Whether or not it can be accomplished under any other system may be open to question. Nevertheless, a substantial part of the general public and some very thoughtful members of the medical and allied professions believe additional methods should be tried."

"The blending of preventive and curative forces and their full utilization in a complete health program scarcely seems possible so long as the receipt of service is contingent upon payment by the beneficiary of a fee to cover the cost of the service. Such a system obviously restricts service to those who are both willing and able to pay for it on such a basis. If a health program is to be comprehensive the primary objective must be to remove this financial barrier. Furthermore, every citizen must be encouraged to utilize the service up to the limits indicated by his need. Variation in need for service should have no weight in determining what payments shall be made by the individual."

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Election Returns and the Doctors

Uppermost in the minds of physicians is the question, "What significance does the recent national election have for the medical profession?" Those who have observed the Washington scene at first hand will have a ready answer. Legislation providing for the establishment of a national health program will undoubtedly be introduced. As regards the kind of a program which will be acceptable to Congress, much will depend upon what organized medicine does in the next few months.

The present Administration, as every physician knows, has been none too sympathetic to the viewpoint of organized medicine. Now that the Democratic majority in Congress has been materially increased, Administration leaders are undoubtedly of the belief that the people have given them the "go" signal on social legislation.

Of course, it is true that even among Democratic legislators there are many who oppose anything that smacks of "socialization" of medicine. This has been demonstrated time and again when medicine has come under discussion. These Democrats are just as adamant as Republicans where regimentation of medicine is concerned. But it is well to keep in mind that there is a growing sentiment favorable to broadening of the Social Security Act. There is also evidence to support the view that not only our veterans but all of our citizens will demand greater security in the postwar years.

This situation serves to confirm the opinion that your Observer has held for some time. Organized medicine has been on the defensive for too long. The American Medical Association should come forward immediately with its conception of a national health program. This program should include voluntary sickness insurance and diagnostic centers. It isn't enough to talk about the desirability of experimentation, to adopt platforms and principles. Our national organization must offer something tangible. Such a step will, to put it mildly, be welcomed by the rank and file of the medical profession, a great number of whom feel that it is long overdue.

Time is fast running out. We still have the ball. What are we going to do with it?

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An Old Southern Custom

Your Observer was intrigued by the title of a paper published in the October issue of the *Journal of the Medical Association of Georgia*—"Changing an 'Old Southern Custom.'" He found himself reading what proved to be a revealing dissertation by Dr. Edwin R. Watson, Director of Maternal and Child Health of the Department of Public Health, on midwifery in Georgia.

Dr. Watson writes: "There are many old Southern customs of which we can be justly proud, but midwifery is not one of them. Midwifery in North America is now largely confined to the Southern states. Over 20,000 mothers in Georgia are delivered by midwives each year. While this picture does not cause us to swell with pride, it should cause us to seriously consider how best to modernize outmoded maternity care practices. . . ."

"Those of us born and reared in the South are acquainted with the term 'midwife' but few of us know midwives intimately. Though I am told that the only attendant at my birth was one of these honorable and superstitious souls, I strongly disfavor the continuation of this class of attendant for a third of Georgia's mothers each year.

"Midwifery in Georgia has existed since Oglethorpe founded the Georgia Colony 211 years ago. Time is said to change all things but midwifery is the exception that proves the rule. It seems to have a remarkable degree of resistance to progress. If we could borrow Alley Oop's time machine and transport one of our aged, superstitious midwives from rural Georgia back through time to Rome of twenty centuries ago, she would not be cast to the lions. She would probably deliver Cornelia of one of her 'jewels' and go quite undetected as a stranger.

"You may ask why this insistence on immediate changes in this old Southern custom. There are many reasons. Dare we continue to delegate a difficult medical procedure to an ignorant, untrained person? Those physicians who have wrestled with obstetric complications can appreciate the absurdity of expecting midwives to care for such cases. Those who have witnessed the sudden appearance of unsuspected conditions also realize the impossibility of screening out abnormal cases from among the midwife clientele. Those who have attempted to instruct midwives testify that, as individuals or groups, they are not teachable and will not discard their ingrained ideas and notions, however false and illogical they may be. As an example of this, I cite the experience of a nurse-midwife who worked intensively with lay midwives in one Georgia county for a year. Despite all her teaching of the importance of giving sterile water to newborn infants, the grannies steadfastly refused to substitute this innocuous fluid for their favorite cockroach tea. The reduction from 9,000 midwives in 1924 to 2,400 in 1943, reveals the urgent need for replacing midwives with professional attendants. Many communities are now without either the services of a physician or a midwife, and neighbors are reentering the picture as attendants. This is retrogression indeed."

"Occasionally in discussing this subject, I am told that midwives have been known to secure better results than physicians. Such statements are subject to disputation. Surely trained physicians can practice better obstetrics than midwives. If I did not think so I would not be interested in medicine as a profession. Some physicians feel that the situation should not be disturbed, which seems both an unrealistic attitude and an attempt to avoid the issue.

"After endeavoring to control midwife activities over a period of years, I am convinced that the only answer is to develop a substitute program which will provide professional care for lay midwife cases, thus removing the need for lay midwifery. Such a program should include facilities for the entire maternity case load, as the requirements of all groups could be met by a single community facility."

To remedy this situation, Dr. Watson recommends the extension of hospital facilities, emphasizing adequate service for maternity cases and newborn infants, and pointing out that not one hospital inspected can meet desirable standards: establishment of maternity shelters in those counties which are unable to support hospitals, it being explained that a maternity shelter may be defined as a structure that provides hospital-type care for normal obstetric cases; utilization of office delivery facilities in areas where maternity shelters are not feasible and where no better facility can be provided; and finally, the necessity of continuing home care in some localities.

Dr. Watson says he is "prepared for those inevitable reactions of discontent and dissent that characterize each new undertaking of this kind, professional or non-professional." And he concludes: "Too often in the past, physicians have approved local plans for medical care even though they were opposed to them. Usually such plans are inadequately evaluated by physicians and often plans are formulated without consulting the physicians concerned. Frequently the pressure of public opinion or the action of a fellow practitioner causes general acquiescence by the local physicians. All too often physicians have subscribed to a medical plan with the mental reservation that the program was impractical. In the future it is essential that we be more deliberate and careful in our acceptance of a medical care plan for the failure of these projects usually reflects unfavorably upon the profession, regardless of where the fault lies."

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Wake Up—or Else

"We as physicians must wake up and follow the trend of public thinking or we shall be forced to do so." This warning has a familiar ring. Medical leaders in various parts of the country have often voiced similar sentiments. Dr. C. B. Bowyer, President of the Medical Society of Virginia, is one of the most recent to caution his colleagues.

"Our present system of medicine," Dr. Bowyer says, "evidently does not adequately protect or minister to the needs of our people. I believe each of us is willing to concede that our system needs to be better planned, or even drastically re-vamped. All of us are painfully aware that, despite the great strides made in our medical centres in both preventive and curative medicine and surgery, we do have, not only in Virginia, but throughout the country as a whole, rural sections badly in need of adequate medical care and hospitalization. Is State or Federal control the answer to this problem? I think not. However, unless we take cognizance of these needs as a profession we shall certainly be forced into some sort of a State or Federal system not to our liking."

He then chides the medical profession for its indifference:

"Despite the trend in the thinking of the public, we as a profession have refused to see 'the handwriting on the wall.' We cannot continue this ostrich-like attitude. Empires have fallen because rulers refused to lend an ear to the voice of the people. Some of us say we cannot be robbed of our 'private' enterprise, or our 'personal initiative' threatened. History has taught us that anything can happen anywhere if the people of any nation are sufficiently aroused. Some of us say that it is absurd to think of medicine becoming a political football. I concede this point but at the same time unless we as a group put forth a sound, practicable plan for adequate medical care and hospitalization for our people we are in danger of being made just that. It is all right for us to praise our scientific and educational work and our contributions to the advancement of medicine but that does not answer America's question, "WHY CANNOT WE HAVE ADEQUATE MEDICAL AND HOSPITAL CARE WITHIN THE REACH OF EVERY MAN, WOMAN AND CHILD?" That question is being all but shouted from the rooftops. IT MUST BE ANSWERED. We must go with the current of public opinion and not just drift with the tide. OURS MUST BE THE INITIATIVE. We may consider medicine as ours, to do with as we please, but we know deep in our hearts that we must be governed by the wishes of our people as a whole. Today as never before this Society and we as individuals are being called upon to make outstanding contributions to the advancement of medicine. We have advanced medicine as a science but we have sadly neglected the economics of medicine, public relations, and better distribution of physicians. We are now face to face with the threat of regimentation and we must come forth with a far-reaching plan to improve our present-day system of distribution. We must assume leadership in providing proposed facilities for insuring against the hazards of sickness and the cost of hospital care. We have gone a long way in preventive and curative medicine but we have failed woefully in adapting medicine to the changing pattern of living."

Along the same line, *California and Western Medicine* in its August 1944 issue editorializes:

> "No doctor of medicine in California, or, for that matter, of any other State in the Union, should delude himself into thinking that these present-day agitations for a new and radically different form of medical practice are ephemeral manifestations, or so-called 'flashes in the pan,' that soon will dissipate themselves into thin air and nothingness. They are not. They are the expression of well defined convictions on the part of probably a majority of citizens that somewhere, somehow, the proper and adequate medical care of all classes of citizens is deficient. Since this opinion is so widespread, and the medical profession has been picked out for blame, it is not surprising that these voting citizens, under the propaganda influence to which they have been subjected, are willing to accept plausible solutions for manifest errors in the distribution of medical care. These lay fellows are not in position to understand that, in the long run, regimented methods of medical practice, under political control, will lead to lower standards of medical care than those now in operation, procedures which have been developed under a system of free enterprise, wherein there has been fair reward for individual initiative, efficiency and better service.
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> "Wherefore, it behooves all doctors of medicine to sense the kind of world they are now living in, and to study trends in relation to the practice of their own profession. Only so, through better coöperative understanding and mutual effort, will the medical profession be able to assure for the people of our Country, a perpetuation of attainment in public health service that will be characterized by continued betterment through evolutionary methods, of low morbidity and mortality records for our Nation, and thus, the achievement of better health for the people of our Nation."

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"Doctors Are Human Beings"—Lee

In an address before the Worcester District Medical Society (Massachusetts) last May, Dr. Roger I. Lee posed the question, "Are Doctors People?" "In many of the folklores," Dr. Lee says, "the doctor, or rather his analogue or prototype, appears as being quite set apart from ordinary people."

Tracing the development of the medicine man from primitive times, he concludes that he has always been "on the spot" in the community which he serves. He says the situation hasn't changed very much fundamentally. "Patients get dissatisfied and seek help in distant places now as they did in the days of medicine men, perhaps as far from Worcester as Boston, New York or Rochester, Minnesota.

> "The community gets about the sort of medical practice it really wants and creates. At times the doctor is better than the community deserves, but in a small community especially, the medicine man of old and the doctor of today are quite at the mercy of malicious gossip. Of course, it is true that whereas the doctor gets blamed for many circumstances and accidents over which he has no control, he is also praised for certain happy outcomes to which he contributed nothing—even

though the balance is favorable to the doctor. Such a situation is stupid and wholly harmful. In the more recent but still bygone days of the apprentice method of education of the doctor, the old doctor passed on to his apprentice the secrets and tricks of his practice. Those were the days of rugged individualism of the doctor. It was this type of family doctor who caught the imagination and acquired the affection of a grateful community. Perhaps his practice of medicine was not perfect. Perhaps only sometimes did he bring cure, but he always brought comfort, physical and mental, to the patient and his family. In the modern days of formal medical education, medicine is far, far better, but it is not now free and independent. It is less so than in the days of the family doctor. Unfortunately or fortunately, as you will, medicine is now under the profound influence of lay opinion and lay action. The controlling bodies of educational institutions are naturally largely composed of laymen, that is, so far as medicine is concerned."

He then proceeds to make the point that the community dominates and controls doctors. "Within the memory of many listeners," he says, "doctors wore an affair called a 'Prince Albert' or frock coat. Certainly doctors were then, even more than now, rugged individualists, and I cannot visualize a convention of doctors setting up the Prince Albert coat as a sort of uniform for the profession. Consciously or not, the wearing of it was a dictum from the community. And take the gold-headed cane of another era. I have always maintained that the only practical use of the gold head was for the physician in those days to thrust it into his mouth to prevent his making any more of an ass of himself than he had already."

Despite the controls set up over them, Dr. Lee says, "Doctors are human beings notwithstanding the fact they are not supposed to be tired, to have vacations or to enjoy uninterrupted dinners or golf games. . . .Doctors, being ordinary people, seek to marry beautiful and intelligent girls. Doctors' wives have seen their husbands volunteer, even before Pearl Harbor, and leave their homes and children. Many of them have been over thirty-eight and even over forty-five. But doctors were not supposed to object. Since the good women are also human, they sometimes object, but the doctor goes. When the war is over, he will not come back to that salary and that pension, but will be obliged to build up his practice all over again in a world that believes that it created doctors in a certain pattern and therefore can destroy them."

". . .The late President Lowell, of Harvard, said with regret that the doctor was too busy and too occupied by keeping abreast of the extraordinary medical advances to participate as he should in public affairs, and that the public was greatly the loser thereby. Nevertheless, the public has always wanted its doctors 'straight,' if you understanding that drinking term. The public looked down its nose, and still does, at literary doctors or artistic doctors. And the doctor has shown that he is human and like other folks when he indulges in literature, art or music, usually almost secretly.

"But this is not a clarion call for the doctor to dominate the world. Anyway, he knows people too well and himself too well. In his more robust and more individualistic moments, the doctor would like to be more master of his fate and his destiny. . . ."

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There Were Giants in Those Days

The doctor of today is certainly far better equipped than his predecessor. As a matter of fact, he has perhaps forgotten more about the science of medicine than the doctors at the beginning of the century knew.

But along the way, he has lost something which the medical man of a former day had. One has but to look back over the history of the Medical Society of the District of Columbia to learn that physicians of yesterday may have been deficient in scientific knowledge but they were giants compared to many of their successors where culture is concerned. This despite the fact that the modern physician is required to take three to four years of college work prior to entering medical school. A considerable number of them were learned men. They read and enjoyed the classics. As speakers and writers they were far superior to a majority of the physicians of today.

Dr. Samuel Clagett Busey was probably one of the outstanding Washington physicians in the latter half of the nineteenth century. Dr. Busey was an avid reader of the best literature. He was a regular contributor to medical journals, wrote essays and delivered addresses. These were of a high literary quality.

Dr. Busey was, of course, only one of many in the history of the Society who were unusually well informed in regard to matters other than those pertaining directly to the practice of medicine. Today the physician whose serious interests go beyond his professional duties is the exception rather than the rule. This is, in part, due to the vast amount of scientific knowledge which a modern physician must absorb in the course of his medical education. Specialization has also been a factor, demanding as it does years of intensive training. Then, too, the lives of most physicians have been speeded to a tempo which makes existence of a former day placid by comparison. So it is not surprising that there is very little time for "outside" reading or any of the extra things which broaden one's horizon.

Whatever the reasons, and these seem plausible to your Observer, the fact remains that few physicians are capable of writing an acceptable article for publication. Neither are they particularly capable as speakers. This is certainly true where non-scientific subjects are concerned.

One wonders if the curriculum of medical schools isn't too overloaded with scientific matter. It occurs to your Observer that if there were more time for cultural subjects, the result would be gratifying to physicians as well as to their patients.

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Everybody's Doing It

Leave it to thoughtless enthusiasts to run a good idea into the ground. An example is postwar planning. Much of it has been premature and so ill conceived that in many quarters the words themselves arouse distrust. The same might be said about rehabilitation of our military and civilian population. There is real danger of this subject being talked to death. Reams have been written about it. Yet this is something which mustn't be allowed to become so commonplace that we no longer recognize its importance. In other words, it would be serious indeed if rehabilitation were overdone in words and underdone in works.

A few weeks ago, the Medical Society's Committee on Rehabilitation of Service Physicians held its fist meeting. Lt. Colonel Stuart Foster, Chairman of the Committee, presented plans to aid service physicians returning to Washington. These included provisions for postgraduate study, maintenance of a map at the Society's headquarters showing locations of physicians' offices, developing opportunities for returning physicians and perfecting an arrangement under which these physicians will be listed with MEDICAL BUREAU for so-called emergency calls, that is, calls from individuals not having physicians who request the BUREAU to send them a doctor.

Consideration had previously been given by other committees of the Society to postgraduate courses. However, this Committee proposed to develop detailed plans.

The second proposal, that of helping returning physicians find a suitable location, is one that struck members of the Committee very favorably.

The last, having to do with MEDICAL BUREAU, is not so new, as the Medical Bureau Committee some months ago voted to make available the BUREAU's services for six months without charge to physicians returning from the armed forces. However, Colonel Foster would go further and transfer all emergency calls to these physicians.

In considering this program, the Committee decided that before it proceeded further, it wished to obtain more information from the medical officers themselves. It directed the Secretary to prepare a communication to be sent to the members of the Society with the armed forces. This letter is to be accompanied by a questionnaire to ascertain whether the physician plans to return to Washington, what type of work he wishes to engage in, and his interest in postgraduate education.

The Committee further voted to recommend to the Executive Board that those physicians who had entered the Army or Navy immediately following their internships be invited to apply for Active membership in the Medical Society with the understanding that their dues be remitted until a year following their return to civil life. This recommendation would, of course, apply only to those who could qualify for membership in the Society.

As will be apparent to our readers, the Committee is fully cognizant of the Society's responsibilities to its men in the services. Before long it should be prepared to present a program to the Society's membership for approval.

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A Failure that Stimulated Progress

When we are particularly well pleased with something we have accomplished, we hope that it will not go unnoticed. If it is, we may find a way to direct attention to it. We are all vain to that extent. That is the only excuse your Observer has to offer for relating how he came to make a modest contribution to the development of medical journals in this country. Here is the story:

Along in the early 1930's, the thought occurred to your Observer that perhaps many county medical societies would like publications of their own but found it impossible for financial reasons. He mentioned this to the publisher of a medical journal with which he was connected. Out of their discussions came a plan which would assure such county societies creditable publications at no cost to them. It was proposed that a corporation be organized which would engage in publishing county medical bulletins. An editorial staff was to be carefully chosen. A syndicated section was to be provided each society plus cover and inserts for local material. National advertising revenue would accrue to the corporation. Income from local advertising, however, would go to the participating society.

This plan was submitted for approval to an official of the American Medical Association. He approved but the plan had hardly been announced before state medical societies indicated their hostility. Despite their opposition, a considerable number of county medical societies throughout the country agreed to and did participate. However, advertising was not obtainable because of the opposition which developed and the plan eventually failed.

An important phase of this undertaking from your Observer's point of view was that for the first time, so far as he is aware, emphasis was placed on the layout and general appearance of medical publications. It was his opinion that medical journals must compete with lay magazines for the physicians' attention. And so the various county medical bulletins which were published for a time were made as attractive as possible from the standpoint of format. Most state and county medical society publications of that period contained solid pages of printed matter without any attempt at design. They were drab and uninviting to the reader.

Your Observer noted that when the plan which has been described had been in operation a very few months, journals in various parts of the country began giving attention to their appearance. Not only did handsome covers begin to appear but the layouts were much superior to what they had been.

An editor of a state medical journal who had opposed the plan once commented on its failure with apparent satisfaction. Your Observer remarked that if the plan had accomplished nothing more, it had awakened medical editors to the unattractiveness of their journals and in consequence they did something about it.

CHRISTMAS SEAL SALE ENDORSED

On November 17, at the request of the District of Columbia Tuberculosis Association, the Subcommittee on Tuberculosis of the Medical Society of the District of Columbia considered the recent activities and present program of the Association and reviewed its financial statement. The members of the Subcommittee were genuinely impressed with the cordial spirit of cooperation being shown and the important character of the work now being accomplished by the Association. Especially worthy of mention in this regard are the Association's projects for education concerning tuberculosis, the mass chest X-ray surveys of employee and census-tract groups, and the well conceived program for the rehabilitation of tuberculous patients now being carried forward at all Washington sanatoria, in coöperation with the District Health Department, the medical profession, and other interested agencies. None of these projects is presently provided for in any adequate manner within the functions of the official health agencies or the medical profession, and each represents an activity which is essential to any modern, well coördinated program for tuberculosis control. For these reasons the Subcommittee was emphatic in its endorsement of this work.

To the members of the Medical Society, therefore, the Subcommittee on Tuberculosis reports its wholehearted endorsement of the 1944 Annual Christmas Seal Sale of the District of Columbia Tuberculosis Association, and recommends that physicians, individually and collectively, by word and by deed, support the truly essential activities of this volunteer health agency.

Clayton B. Ethridge, M.D.
Chairman, Subcommittee on Tuberculosis

COMMITTEE ON MEDICAL CARE SUBMITS PRELIMINARY REPORT

There is no activity of the Medical Society of the District of Columbia which is more important at this time than that being carried on by the Committee on Medical Care. For upon the plans developed and carried through by this Committee with the approval of the Society will depend to a large extent the future of medical practice in this community. The Committee has been at work for several months and at a business meeting of the Society in November it submitted the following preliminary report:

Since the first of July, with some changes in Committee assignments, the Committee on Medical Care has been quite active.

The general trends of present-day medicine, which seem to be dependent on social trends, the improved and increased medical care received by many through the Army and Navy and the greater interest of the Federal Government in medical care have been viewed by the Committee with considerable interest and, at times, with a little apprehension. The need for a wider spread of medical services and the budgeting of the cost of such services become increasingly apparent, irrespective of any pressure upon organized medicine.

Budgeted (or prepaid) hospital service, as beautifully exemplified by our local Group Hospitalization, Inc. stimulates an interest in a similar type of budgeted medical service and sets an example by which organized medicine locally, as well as in other parts of the country, may well benefit. Experiments in prepaid medical, surgical and/or obstetrical care have met with varying success in California, Michigan, New Jersey, New York, North Carolina and in other parts of the country. The increasing success of many of these plans and the experience gained from them stimulate us to think of a similar thing for the District of Columbia.

The Committee on Medical Care in its several meetings has considered:

1. A plan of prepaid surgical and obstetrical service for all, irrespective of income, and
2. Improved diagnostic facilities for the low and middle income group.

The Subcommittee on Prepaid Medicine has spent many hours trying to formulate a surgical and obstetrical service plan which would be acceptable to the medical profession and to the public and which would be possible to administer on a sound basis. It is our hope to present such a plan for the Society's consideration in the near future. We are pleased to report that Group Hospitalization, Inc., has taken a considerable interest in such a plan and made valuable suggestions toward formulating and improving it. Their further coöperation and advice can be hoped for.

The Subcommittee on Diagnostic Clinics, under the chairmanship of Dr. Harry Dowling and with extensive help from the U. S. Public Health Service through Dr. V. M. Hoge and his associates, has made great strides in planning improved diagnostic facilities for the District of Columbia. The equipment, cost, administration and staffing of a complete diagnostic service for the middle and low income group is being carefully considered and the Subcommittee hopes to submit in detail a report in the near future.

It is the hope of the Committee on Medical Care that its present work may be viewed by the Medical Society with thought for the future—both the future of the public health and the future of organized medicine. Every effort will be made to stimulate interest and support for the plans now under consideration.

Respectfully submitted,

FRANK D. COSTENBADER, M.D.
Chairman

REPORT OF THE EXECUTIVE BOARD*

Heretofore reports presented by the Executive Board to the Society at regular business meetings have not been published in the MEDICAL ANNALS. The principal reason for not doing so has been the fact that these reports have been mimeographed and distributed to those who participate in business sessions. Then, too, they are usually rather lengthy. However, it now seems desirable for the ANNALS to carry at least a substantial portion of the reports because only a minority of the membership attend business meetings.

Actions Taken by the Board From May 29 to October 23, 1944.—The following matters were considered by your Board since the Annual Business Meeting last May and action taken as indicated:

1. Appointed a subcommittee consisting of three members of the Board to study proposed changes in the Constitution and By-laws. Later this subcommittee was increased by two non-Board members. Subcommittee membership was as follows: Dr. Roger M. Choisser, *Chairman*; Drs Coursen B. Conklin, A. Magruder MacDonald, Henry C. Macatee and A. B. Bennett.

The subcommittee reviewed proposed amendments, submitting its recommendations to the Board. The Board endorses these recommendations in this report.

2. Instructed Dr. Coursen B. Conklin, the Delegate to the American Medical Association, to oppose a resolution which the California Medical Association proposed to introduce at the meeting of the House of Delegates of the American Medical Association in June endorsing the United States Public Health League.

3. Approved the Ohio State Medical Association's endorsement of the American Medical Association as "the proper organization to represent the medical profession of this country on legislative matters and questions pertaining to health and medical activities of all departments and agencies of the Federal Government, as well as similar activities of national unofficial and voluntary groups and organizations."

4. Took the position that Dr. Morris Fishbein, Editor of the *Journal of the American Medical Association*, should no longer continue as spokesman for the Association but, recognizing his ability as a journalist, that he be continued as editor of the *Journal.*

Dr. Conklin was requested to express this as the Society's attitude at the meeting of the House of Delegates last June, should the California resolution relating to this matter be presented.

5. Approved a statement made by President Sanderson at a meeting of the Council on Medical Service and Public Relations of the American Medical Association held at the Mayflower Hotel on May 22. (Members will find this statement in the July 1944 issue of MEDICAL ANNALS. Those who have not read it should do so.)

6. Submitted the names of five physicians to the Director of the Office of Price Administration for the District for appointment to the District O.P.A. Medical Advisory Committee. Those appointed were Dr. Hugh H. Hussey, *Chairman*; Drs. James M. Moser, Roy Lyman Sexton, Roger O'Donnell and Thomas F. Collins.

7. Considered a communication received by Dr. George C. Ruhland, Secretary of the Commission on Licensure, from Dr. John T. O'Mara, Secretary of the

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* Presented at the Regular Business Meeting of the Society on November 1, 1944.

Maryland State Board of Medical Examiners, informing Dr. Ruhland that the Maryland Board was of the opinion that their regulations dealing with borderline certificates should be changed because "the population of the District of Columbia has extended well into Maryland, and in addition, there are now the two hospitals recently built, one in Montgomery county, the other in Prince Georges county." The regulations proposed follow:

"1. That borderline certificates be given those licentiates of the District of Columbia who visit occasional patients over the border into Maryland (we'll say three or four a year). However, the Law provides

> '. . .that such practitioners shall not open an office or appoint places to meet their patients or receive calls within the limits of this State without complying with the provisions of this sub-title; . . .' (that is, obtain a license to practice in Maryland).
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> This is to be a privilege, not a practice.

"2. Physicians licensed in the Dictrict of Columbia but not in Maryland who wish to attend patients in Maryland hospitals should have a full license to practice in Maryland.

"3. Physicians licensed in the District of Columbia but not in Maryland, who are residents of Maryland, are not eligible for the borderline certificate.

"4. Applicants for the borderline certificate must present statement from the District of Columbia Commission on Licensure showing that they are licensed to practice in the District of Columbia. There is a fee of $1.00 for the service."

The Board opposed the first three proposals and so informed Dr. Ruhland. It stated as its reasons the shortage of physicians and the increase in population in the Washington Metropolitan Area. Your Board recommended that if the Maryland Board insisted on going through with its proposals, the Commission on Licensure of the District should adopt similar regulations. Dr. Ruhland agreed with the Board's position and forwarded a copy of a letter which he had directed to Dr. O'Mara. There have been no further developments in this situation.

8. Created Committee on Rehabilitation of Service Physicians. Members of this Committee are: Lt. Colonel Stuart O. Foster, M.C., U.S.A., *Chairman*; Drs. Custis Lee Hall, Harry H. Kerr, James A. Lyon, Daniel B. Moffett, J. Ogle Warfield and Charles Stanley White.

9. Designated Dr. F. X. McGovern, Chairman of the War Participation Committee, to represent the Medical Society on the District of Columbia Committee on Services to Veterans and War Workers.

10. Revamped procedure followed by the Society's office and MEDICAL BUREAU in giving names of physicians who treat syphilis and gonorrhea. Those now included in the list are internists, urologists, gynecologists and dermatologists who, upon being canvassed, indicated their desire to serve patients in either category.

11. Appointed Dr. Custis Lee Hall as representative of the Medical Society to the Washington Council for the Handicapped.

12. Endorsed the action of the Committee on Public Policy approving the so-called Tydings Hospital Bill (S. 2074) in principle "provided that all non-profit voluntary hospitals rendering service to the indigent and the near-indigent in the District of Columbia be given equal opportunity to participate and are assured equal representation in the corporate body."

13. Investigated the group health and accident insurance policy for physicians submitted by a representative of the Massachusetts Casualty Company of Boston. The Board decided not to endorse this policy but instructed the Secretary to respond favorably when inquiries are received about this company and its group policy. The representative informed the Society that this was not satisfactory to him and that he would not solicit the Society membership without endorsement.

The Board authorized a canvass to determine how many members would participate in a group health and accident policy.

14. Approved the action of the Committee on Public Health and the Subcommittee on Mental Health appealing to all the neurologists and psychiatrists in Washington to take on part-time service at Gallinger Hospital if possible.

15. Obtained a statement from A. H. Baker and Company, Inc., general agents for the United States Fidelity and Guaranty Company, to the effect that physicians insured under the present contract, that is, the group malpractice policy carried by the Society with the company, are covered while practicing in jurisdictions other than the District. The communication stated:

"The exclusion referring to violations of the law under the contract actually refers to specific violations of the law in the practice of medicine and not to a State regulation regarding whether or not the physician is properly licensed in the jurisdiction in which the incident took place. This has been verified with our Home Office and you can assure the members of the Society that our contract will give them complete protection regardless of the jurisdiction in which they are practicing at the time a claim may be made against them."

16. Voted to make the first floor of 1710 M Street, N.W., available to the Council on Medical Service and

Public Relations of the American Medical Association if a satisfactory lease can be agreed upon.

17. Requested the House Committee to have the Department of Building Inspection inspect the property at 1710 M Street, N.W., to ascertain whether it meets requirements of the D. C. Building Code, and also to ascertain its safety.

These are the highlights of the Board's activities. There were, of course, many matters of routine nature which would be of little interest to you. Nevertheless, a large portion of the Board's time is devoted to them.

Proposed Amendments to the Constitution and By-laws.—Two amendments to the Constitution and By-Laws are presented for your consideration in this report. They cannot be acted upon until the next special or regular business meeting for the Constitution and By-laws provides that they must be presented at one business meeting and voted on at a subsequent one.

As stated previously in this report, the Board appointed a subcommittee to study proposed changes in the Constitution and By-laws. Amendments submitted here are those which were prepared with the aid of the Society's legal counsel and approved by this sub–committee.

The first amendment which is offered for consideration reads as follows:

AMENDMENT VII

Section 1. Section 3 of Amendment II to the Constitution and By-laws is hereby repealed.

Section 2. A business meeting shall be held on the first Wednesday in May. Other business meetings shall be held when ordered by the Society or the Executive Board, or upon the written request of any thirty-five members. All other meetings shall be scientific meetings. Pending matters usually considered at business meetings, including the election of members, may be taken up at the next subsequent scientific meeting as emergency business.

This amendment would repeal that portion of Amendment II, Section 3, which provides that business meetings shall be held on the first Wednesdays of March, May and November and substitute therefore the sentence (see Amendment VII, Section 2, above) reading, "A business meeting shall be held on the first Wednesday in May." The remainder of Amendment VII, Section 2, reads the same as Amendment II, Section 3.

One of the reasons for offering this amendment is that at present business meetings must be held when there is no particular reason for holding them. If this amendment is passed, the only regular called meeting will be the Annual Business Meeting. However, should matters of general policy demand immediate consideration by the Society, the amendment specifies that a meeting shall be called by the Society or the Executive Board, or upon the written request of any thirty-five members.

There were other reasons why your subcommittee and the Executive Board favored the adoption of this amendment. For example, it is difficult to obtain even a fair attendance at business meetings. To stimulate interest in these meetings, speakers have been invited to address the Society following the business session. Your Board is of the opinion that it would be better to adopt the practice of other state and county medical societies of holding an annual business meeting at which time financial and other reports are received and policies formulated which, so far as can be foreseen, will guide the Board in the ensuing year.

The By-laws, as has been stated, is clear on the point that matters of general policy must be approved by the Society. Your Board will, as it has in the past, call special meetings to consider any urgent matters relating to policy.

Attention might be called to the fact that Article I, Section 2, of Chapter III provides that the first meeting in May of each year shall be the Annual Business Meeting of the Society and shall be devoted to the reception of annual reports and other annual business including the election of officers and that Article II, Chapter VI, specifies that nominations for office shall be made orally at the first meeting in March. Neither of these provisions is affected by Amendment VII.

The second amendment which the subcommittee submitted to the Board and which it also approves is the following:

AMENDMENT VIII

Section 1. Sections 4, 5 and 6 of Article I of Chapter X of the Constitution and By-laws are hereby repealed.

The Sections repealed by Amendment VIII deal with controversial matters more or less related to the recent trial. In view of the fact that the Department of Justice has held these Sections of our Constitution and By-laws to be illegal, your Board is of the opinion that Amendment VIII should be adopted.

16th Annual Scientific Assembly.—It is a pleasure to report to you that the 16th ANNUAL SCIENTIFIC ASSEMBLY, despite wartime conditions, was a great success. The attendance alone attests to this fact, there being a registration of 2,001, of which 1,040 were physicians. . . .

It should be remembered, too, that we are indebted to the Army, Navy, United States Public Health Service, Veterans Administration, Federal Security Administration, various medical institutions in the Nation's Capital and to our own members for the splendid exhibits.

In regard to finances, final figures are not available but it appears that there will be a small surplus after all expenses have been paid. For the past two or three years the Society has not appropriated any money for the ASSEMBLY. The ASSEMBLY has been entirely self-supporting. Not only that, but the luncheon which is given for the Society members is also financed from the ASSEMBLY's revenue. Sources of revenue are the sale of booth space to commercial exhibitors and the registration fees for out-of-town physicians.

All in all, the Board is very much pleased with the ASSEMBLY and it is sure you feel the same way about it.

Remodeling of Society's Building at 1710 M Street, N.W., and the Future Use of This Property.—Most members are familiar with the fact that the Society owns the building at 1710 M Street, N.W., adjoining the building in which we are meeting. This property was purchased by the Society on December 31, 1937, at a cost of $30,090.80. The original loan on the property was $25,000.00. Payments have been made regularly on the principal and the present indebtedness is $19,750.00. The assessed valuation of the property in 1944 is $34,297.00.

At a meeting of the Society on October 8, 1941, the board made a special report in which it endorsed a recommendation by the House Committee that this property be sold. Several reasons were advanced by the Committee for its disposal. However, there was strong opposition to this being done and as a result the property was held. Your Board is now of the opinion that this action was, perhaps, wise, in view of the Society's need for additional space.

But the situation as regards this building is far from being a happy one. The facts are that the building at present is in a deplorable state and certainly is no credit to the Society. . . .

Your Board recognizes that in the midst of a war restoration will be difficult. Nevertheless, the Society should not own a building in this condition. Naturally, the tenants have not been any too satisfactory because no one seeking a desirable place would rent this property. At the present time, a family rents an apartment on fourth floor; the third, second, part of the first floor and the basement are run as a rooming house. There have been complaints regarding the manner in which this has been operated.

The front apartment on first floor was restored for the use of the MEDICAL BUREAU at considerable expense some months ago. These quarters look very nice but the work done was, of necessity, limited; otherwise the cost would have been very much more than it was.

The Committee, with the Board's approval, proposes that you authorize the complete remodeling of the building at 1710 M Street, N.W. The cost will be approximately $15,000 to $20,000. To raise the funds to finance this undertaking, the Committee recommends, and the Board concurs, that the loan on the property be refinanced to pay for the remodeling. What is needed in addition to what is raised in this manner should be financed directly by the Society.

This is not a matter in which delay is possible. District authorities have notified the Society that unless certain changes are made in the building, such as erecting a fire escape on the front, which would certainly not improve its appearance nor add to the attractiveness of the Society's building, the Society will find itself in difficulties.

As to the future use of the building, the Council on Medical Service and Public Relations of the American Medical Association now has an office in Washington. Its Director, Dr. Joseph S. Lawrence, has notified the Society that the Association would like to rent the first floor of 1710 M Street, N.W. He and his associates believe that it would be desirable for the Association's office to be near the Society's building. . . .

Invitation to Members to Attend Board Meetings.—It has been suggested by those who have served on the Executive Board previously that few members realize the volume of business which it transacts and also the kind of problems that come before it. Various means of getting this information to the membership have been suggested. Your Board has voted to experiment with a method that may prove satisfactory.

Your Board hereby extends an invitation to all Active members of the Society to attend its regular meetings. Board meetings are held in the Society's building on the fourth Monday of each month. Members who find it possible to be present and are interested will be most welcome.

Publicity will be given this invitation in the MEDICAL ANNALS. . . .

CONCLUSION: Before concluding this report your Board wishes to call your attention to the important discussions being held in Washington, particularly on Capitol Hill, in regard to medical care in the future. Following the coming election, there will undoubtedly be increased activity in this regard.

We sincerely hope that our medical men will inform themselves. This is not as difficult as it might seem. You may not be able to attend hearings such as are being held by Senator Pepper's Senate Subcommittee on

(Continued on page 480)

MEDICAL ASPECTS OF THE B-29

BRIGADIER GENERAL CHARLES R. GLENN
Deputy The Air Surgeon, Army Air Forces

The development of the B-29 Super-fortress with an operational ceiling and range in excess of those of any previous bombardment aircraft required the formulation of better solutions to old problems of physiologic and psychologic stress. Many of these problems were associated with the use of the pressurized cabin which has as its primary function the extending of the ceiling for efficient physiological performance. Cabin pressurization eliminates the need, except at extreme altitudes, for the use of oxygen masks with resultant discomfort, fatigue and restriction of movement. Ear and sinus disturbances and the gastrointestinal distention and pain which frequently accompany large changes in altitude are minimized. Aeroembolism is prevented. The heat resulting from air compression provides protection against frostbite, and the pressure cabin design results in reduction of noise levels.

Pressurization of the B-29 is accomplished by a super-charger which introduces air into the cabin faster than it can escape and at rates varying with the pressure outside of the plane. The super-charger begins to function when the plane has reached a predetermined altitude, and the pressure within the cabin is held constant while the plane continues to rise. Above a certain altitude, the super-charger maintains a constant pressure differential between inside and outside atmospheres.

A hole made by cannon shell or flak if large enough would result in almost instantaneous loss of cabin pressure. The fear of the consequences of such explosive decompression to crew members represented a considerable psychological handicap in the combat use of pressurized cabins. To obtain a true evaluation of this problem an extended study using 150 human subjects was undertaken at the Aero Medical Laboratory at Wright Field. The tests were conducted by placing a subject in a single-seat sealed cabin constructed with a circular opening at one end covered with stout paper. The cabin was placed in a low pressure chamber and the required pressure differential between the cabin and the chamber created by reduction of the pressure in the chamber. Rupture of the paper drumhead produced almost instantaneous decompression of the subject.

Data from this study together with information collected from firing tests on pressurized fuselages and from instances of accidental decompression while in flight have indicated that in general explosive decompression in itself is harmless. There are several potential hazards associated with explosive decompression. Among them are acute anoxemia, abdominal distention, ear and sinus disturbances, aeroembolism and fear.

The sudden reversal of the oxygen pressure gradient under conditions of explosive decompression enhance the rapid onset of acute anoxemia. To overcome this danger a warning horn which sounds automatically when the cabin pressure falls below a safe level is installed in the B-29. Crew members are trained to hold their breath and to put on their oxygen masks when the horn sounds. The masks are carried hung over their shoulders at all times during pressurized flight.

Thus far there have been no reports of unusual distress from the expansion of intestinal gases, of ruptured eardrums, or of ear or sinus disturbances differing in type or degree from those associated with slower rates of ascent. The ease with which large positive pressures in the middle ear and accessory sinuses are dissipated is consistent with the known anatomic structure of these areas.

Theoretically the extreme rate of ascent associated with explosive decompression should increase the risk of aeroembolism. Actually, minimal difficulty has been experienced from this cause in the course of experimental and accidental explosive decompressions.

To combat the development among crew personnel of fear of a new and unknown risk, flight surgeons of the first B-29 wing underwent explosive decompressions in the test chamber at the Aero Medical Laboratory. Upon returning to their squadrons they held conferences with crew members and on the basis of their personal experiences were able to dispel many wild notions that had existed. The occurrence of several accidental explosive decompressions without harm to crew personnel during training flights helped to allay fear.

The hazards attendant upon high altitude bail-out were given consideration in the formulation of the training program for B-29 personnel. The free-fall technic was adopted as standard bail-out procedure to avoid the dangers of severe parachute opening shock, anoxia and frostbite. Crewmen were instructed not to open the chute above 5,000 feet, the altitude at which objects on the ground become definitely identifiable. When falling into a solid overcast, the chute is opened just prior to entering the clouds. Suspension harnesses and jumping platforms were used in training in body turns and tumbling to reduce the potentiality of injuries from landing in poor position.

The long duration of B-29 missions made the provision of adequate care aloft for combat casualties more significant than in the case of any previous aircraft. Accordingly, Super-fortresses were equipped with a number of kits containing splints, bandages, dressings, and a variety of drugs. Several units of blood plasma and serum albumin are also available in each aircraft. Every crew member is taught the proper methods of control of hemorrhage, administration of morphine, and the application of splints and dressings. Two members of each crew are given advanced practical training in first aid procedures in which the treatment of shock by administration of blood substitutes is stressed. The response of the crew members to this type of training has been gratifying and a high type of proficiency has been attained.

Another aspect of the long duration of B-29 missions was the increased importance of providing palatable and nourishing meals aloft. Each plane is equipped with two electric food warmers. Each warmer contains six individuals trays and twelve one-pint cups for soups and beverages. The tray holds sufficient food for one full meal and a snack. The individual trays make it possible for a crew member to eat when he is hungry and can be spared from his station. The food and drink are prepared by ground personnel who were given special training in the preparation and packing of in-flight meals. The meals are placed in the food warmer before the take-off and kept cold until about two hours prior to use.

ARMY DISCONTINUES RECRUITMENT OF CIVILIAN PHYSICIANS

Paul V. McNutt, Chairman of the War Manpower Commission, announces that he has been informed by the War Department that recruitment of civilian physicians for the Army has been discontinued. At the same time he announces that recruitment for the Navy must continue, since it has urgent need for approximately 3,000 additional medical officers. The U. S. Public Health Service and the Veterans Administration are also continuing to recruit physicians, Mr. McNutt said.

Vice Admiral Ross T. McIntire, Chief of the Bureau of Medicine and Surgery, U. S. Navy, informed Mr. McNutt that personnel expansion and intensification of operations in the Pacific have precipitated a grave shortage of medical officers.

"With less than 13,000 medical officers on active duty in the Navy, the procurement of at least 3,000 more as soon as possible is imperative," said Admiral McIntire. "Even this figure will not meet actual needs but would ease the emergency that now exists; physicians and surgeons whose availability has been or may hereafter be certified by the Procurement and Assignment Service, WMC, should lose no time in obtaining particulars for commissions in the Navy Medical Corps by communicating with their nearest office of Naval Officer Procurement."

Mr. McNutt said he had been informed that the Army will fill its future requirements for military physicians from sources now available to the Army and thereafter will not require certification of availability of additional physicians from the Procurement and Assignment Service of the War Manpower Commission. There are now about 47,500 physicians on duty as medical corps officers of the Army. This probably includes those serving with the Veterans Administration and other governmental agencies to which the Army Medical Corps assigns its medical corps officers.

Mr. McNutt said that there are at present roughly 60,000 physicians in the armed forces and the Veterans Administration. The total number of physicians in the armed forces represents approximately 40 per cent of the active medical profession of the United States.

In addition to the 3,000 medical officers needed at present by the Navy, the Public Health Service has need for approximately 300 for the U. S. Coast Guard and other agencies.

In informing Mr. McNutt of the termination of the Army recruiting of physicians except for the occasional specialist, Major General Norman T. Kirk, Surgeon General of the Army, said, "The large number of physicians now in the Army volunteered for commissions without regard for their personal interests. The U. S. Army Medical Department is appreciative of the fine service they have given. Their removal from their usual practice also represents a sacrifice on the part of all civilians, who have had to get along with less medical care than they obtained in peacetime."

The Veterans Administration has, and will continue throughout the duration of the war emergency to have, assigned to it medical officers in the Army and the U. S. Naval Reserve to care for the needs of the casualties in its charge, the War Manpower Commission said. Doctors whose applications are at present in process for appointment in the Army Medical Corps will be considered for appointment and assignment to duty with the Veterans Administration, the War Manpower Commission statement added.

Mr. McNutt said that the War Manpower Commission joins with the directing board of its Procurement and Assignment Service and the War Department and the Office of the Surgeon General in expressing appreciation of the sacrifice involved in coöperation that was necessary on the part of physicians and the public before the Army reached its present level of medical personnel.

Mr. McNutt also expressed the hope that additional civilian physicians will respond to the Navy's appeal for more doctors to apply for commissions. The needs of the U. S. Public Health Service and the Veterans Administration, he said, although much smaller than those of the Navy, are nevertheless important.—J. A. M. A., 1944, **126**, 645.

MEDICAL OFFICERS INSPECT RHEUMATIC FEVER CENTERS

Lt. Colonel Roy H. Turner, M.C., Chief of the Communicable Disease Treatment Branch, Medical Consultants Division, and Major Henry B. Gwynn, M. C., Reconditioning Consultants Division, recently inspected the rheumatic fever centers at DeWitt General Hospital, Auburn, Calif., Torney General Hospital, Palm Springs, Calif., and Foster General Hospital, Jackson, Miss. The sites for these centers were selected because of their ideal climate. The officers reported that all of them are in attractive surroundings—an important factor since the medical program for rheumatic fever patients is largely one of convalescence and reconditioning.

HOSPITAL NAMED FOR COLONEL MADIGAN

Madigan General Hospital at Fort Lewis, Washington, has been named in honor of the late Colonel Patrick S. Madigan, M.C., U.S.A., a graduate of Georgetown University School of Medicine. At the time of Colonel Madigan's death in May of this year, he was Chief Surgeon at Fort Belvoir (Va.) Station Hospital.

Colonel Madigan began his Army service in 1917, serving in France during the last war. He was stationed in the Philippine Islands for two years, and served four years in the Panama Canal Zone. In 1940 he was appointed medical adviser to The Surgeon General and The Adjutant General of the Army. Before going to Fort Belvoir in February he was commanding officer of Camp Lee (Va.) Station Hospital.

On The Home Front

The Seventh Annual Forum on Allergy will be held in the Hotel William Penn, Pittsburgh, January 20 and 21, 1945. Further information may be secured from Dr. Jonathan Forman, Director, 956 Bryden Road, Columbus 5, Ohio.

The Second Annual Meeting of the Department of Ophthalmology of George Washington University School of Medicine was held December 2. The following physicians gave case demonstrations: Drs. E. Leonard Goodman, Ronald A. Cox, Frank D. Costenbader, Richard W. Wilkinson, Sterling Bockoven, C. R. Naples, and Major James Spencer, M.C., U.S.A.

Lt. Colonel John L. Matthews, M.C., U.S.A., spoke on "Ophthalmic Injuries of the War"; Dr. Ernest Sheppard read a paper on "Right Superior Oblique Paresis with Left Inferior Oblique Paresis."

The Section on Pediatrics met in the Society's building, November 16. The program consisted of a Symposium on Behavior Problems in Childhood by Drs. John E. Everett, Hanna Colm, John A. Washington and Rex E. Buxton, who presented the viewpoint of the anesthetist, psychologist, pediatrician and psychiatrist, respectively.

Dr. Robert H. Groh gave the annual Chairman's Address before the **Section on Neurology and Psychiatry** at its first fall meeting, November 16. "Amyotrophic Sclerosis of Luetic Origin" was the subject of a paper read by Dr. Antonio Gonzalez-Revilla.

The following officers were elected for 1944–45:

Lt. Comdr. Zigmond M. Lebensohn, M.C., U.S.N.R., *Chairman;* Dr. James W. Watts, *Vice Chairman;* Dr. Robert T. Morse, *Secretary-Treasurer.*

The Clinico-Pathological Society met November 6 at the home of Dr. B. W. Leonard. Dr. Norman H. Topping of the U. S. Public Health Service spoke on "Rickettsial Diseases of Military Importance." A case report on "Metastatic Lesions of Carcinoma of the Fundus Uteri" was given by Dr. Henry L. Darner.

Calendar of Meetings

November 1	Business Meeting of Society
November 7	Subcommittee on Fees, Committee on Medical Care
November 8	Scientific Meeting of Society
November 10	Committee on Membership
November 14	Special Building Committee
November 16	Section on Pediatrics Section on Neurology and Psychiatry
November 17	Subcommittee on Tuberculosis
November 27	Executive Board
November 28	Grievance Committee
November 29	Scientific Meeting of Society

At the second meeting of the **George Washington University Medical Society,** November 18, the subject under discussion was "Preoperative and Postoperative Management." Colonel Rettig A. Griswold, Chief of Surgical Service, Walter Reed General Hospital, gave the opening address. Among the discussants were Drs. Paul S. Putzki, William D. Claudy, Weston Bruner, Jr., and Thomas M. Peery.

Dr. A. Barklie Coulter, Director of the Bureau for Tuberculosis, District Health Department, has requested that physicians be reminded that they must report all cases of tuberculosis. Communicable disease regulations require physicians "to report within 24 hours the existence of such communicable disease or suspected communicable disease, or communicable disease carrier to the Health Officer. Such report shall be in writing and shall contain the full name, address, age, sex, race, and place of work or school of the person affected in addition to the name of the communicable disease, suspected disease, or communicable disease carrier, and the name and address of the physician who referred the patient or transmitted the specimen for examination, except in the case of chancroid, gonococcal infections, and syphilis the name of the person affected may be referred to by number. Whenever a physician elects to report by number instead of by name, he shall be required to keep a record of the case in question in his files under a corresponding number." Dr. Coulter has furnished the Society's office with a supply of cards for reporting tuberculosis. Those who do not have these forms can obtain them either by calling DIstrict 3111 or by making their request directly to the District Bureau for Tuberculosis, National 6000.

Dr. Louis S. Greene discussed various aspects of glaucoma before the Seventh Annual Meeting of the District Society for the Prevention of Blindness, November 16.

At this meeting the Nominating Committee announced the names of new members of the Board of Directors. Among those to serve for three years are **Dr. Frank D. Costenbader** and **Dr. Inez E. Wilber**; to serve for two years, **Dr. Ella Oppenheimer.**

Dr. George Tully Vaughan and Mr. Clifford K. Berryman, cartoonist for the *Washington Star*, were awarded citations for distinguished service by the District Society of the Sons of the American Revolution, at a dinner, November 15, at the Mayflower Hotel.

Major General Norman T. Kirk, Surgeon General of the U. S. Army, gave the opening address and the dinner address at the 52nd Annual Meeting of the Association of Military Surgeons, which was held in New York City, November 2, 3 and 4.

Dr. Wallace M. Yater and Mr. Theodore Wiprud attended the Secretaries' Conference of the American Medical Association in Chicago, November 17 and 18. Dr. Yater, accompanied by **Dr. Stephen W. Nealon, Jr.,** visited the Mayo Clinic at Rochester, Minn., before returning to Washington.

Dr. Addison Duval gave the introductory address at opening session of the **41st Annual Meeting of the Graduate Nurses' Association and the League of Nursing Education of the District of Columbia,** November 13. A joint program for the two organizations was held at St. Elizabeths Hospital, with "Mental Hygiene Aspects of Problems of Demobilization" as the main subject for discussion.

Major Russell McNitt, M.C., A.U.S., visited the Society's office, November 13. Major McNitt has been away from Washington for almost four years, having spent more than a year in Denver prior to two and a half years' overseas duty.

Dr. Leonard M. Dub has been delegated by the Washington Chapter of the Society of American Magicians to determine whether local boys want to organize an amateur group under its sponsorship.

A new type hospital car for use in the United States was opened for inspection in Washington, November 13. These new cars, which are designed and built especially for hospital service, are ten feet longer than Pullmans, are air-conditioned, and can accommodate 38 patients and attendant personnel. Each includes two rows of triple-tiered beds, two compartments with three beds each, a stainless steel kitchen equipped with refrigeration, ice cream cabinet and coal range; a receiving room with four-foot side doors for loading and unloading litter patients; two roomettes, each with toilet and shower, for the medical staff or seriously ill patients; and a baggage compartment. Also included are a modern pharmacy unit and sterilizing equipment; in case of emergency either the receiving room or one of the roomettes can be converted quickly into an operating room. The Glennon-type, steel-frame beds are adjustable and unoccupied center bunks can be dropped to provide seating accommodations for ambulatory patients.

MEETINGS

Wednesday, January 10

The following program has been arranged by the *Washington Chapter of the Fracture Committee of the American College of Surgeons:*

"Fractures—Optimum Time of Reduction," JOHN ROYAL MOORE, M.D., F.A.C.S., Professor of Orthopedic Surgery, Temple University School of Medicine; Chief of Orthopedic Service, Temple University Hospital.

Wednesday, January 24

Speakers and subjects to be announced.

BOOKS RECEIVED FOR REVIEW

Operative Procedure, 9th ed., 2nd rev. Pp. 126. New Brunswick, N. J.: Ethicon Suture Laboratories, Division of Johnson & Johnson, 1944.

Global Epidemiology—A Geography of Disease and Sanitation, vol. 1. James Stevens Simmons, B.S., M.D., Ph.D., Dr. P.H., Sc.D. (Hon.), Brigadier General, U. S. Army; Chief, Preventive Medicine Service, Office of The Surgeon General, U. S. Army; Member, National Research Council and Committee on Medical Research, O.S.R.D.; Lecturer, Department of Preventive Medicine, Johns Hopkins University Medical School; Lecturer in Public Health, Yale University School of Medicine; Professorial Lecturer in Preventive Medicine, George Washington University Medical School; Member, Visiting Committee, Harvard School of Public Health; Lecturer in Tropical Medicine, Army Medical School; Tom F. Whayne, A.B., M.D., Lt. Col., M.C., A.U.S., formerly Director, Medical Intelligence Division, Preventive Medicine Service, Office of The Surgeon General, U. S. Army; Gaylord West Anderson, A.B., M.D., Dr. P.H., Lt. Col., M.C., A.U.S., Director, Medical Intelligence Division, Preventive Medicine Service, Office of The Surgeon General, U. S. Army; Director, School of Public Health, University of Minnesota; Harold Maclachlan Horack, B.S., M.D., Major, M.C., A.U.S.; Chief, Dissemination Branch, Medical Intelligence Division, Preventive Medicine Service, Office of The Surgeon General, U. S. Army; Instructor in Medicine, Duke University School of Medicine; and collaborators. Pp. 504. Philadelphia: Lippincott, 1944.

Taber's Dictionary of Gynecology and Obstetrics. Clarence Wilbur Taber, Medical Editor, and Author of *Taber's Cyclopedic Medical Dictionary*, *Taber's Condensed Medical Dictionary*, and *Dictionary of Food and Nutrition*, with the collaboration of Mario A. Castallo, M.D., F.A.C.S., Assistant Professor of Obstetrics, Jefferson Medical College; Gynecologist to St. Mary's and St. Agnes' Hospitals; Obstetrician to St. Mary's Hospital; Diplomate, American Board of Obstetrics and Gynecology. Price, $3.50. Pp. 700 +, illustrated. Philadelphia: Davis, 1944.

Metastases—Medical and Surgical. Malford W. Thewlis, M.D., Attending Specialist in General Medicine, U. S. Public Health Hospitals, New York City; Attending Physician, South County Hospital, Wakefield, R. I.; Special Consultant, Rhode Island Department of Public Health; Author, *Care of the Aged (Geriatrics)*, *Preclinical Medicine*. Price, $5.00. Pp. 230, with 13 illustrations. Charlotte, N. C.: Charlotte Medical Press, 1944.

REPRINTS RECEIVED

The following reprints have recently been received, for which due acknowledgment is made:

"Fundamental Concepts in the Treatment of Diabetes Mellitus and Its Complications." New York: New York Diabetes Association, 1944.

"A New Method for Quantitative Estimation of Microfilariae in Blood Samples." Frederick J. Brady and Alfred H. Lawton. Journal of Parasitology, February 1944.

"Effect of Chlorination of Water on Viability of Cysts of Endamoeba Histolytica." Frederick J. Brady, Myrna F. Jones and Walter L. Newton. War Medicine, April 1943.

"The Artistic Canons in the Teaching of Anatomy." W. Montague Cobb. Journal of the National Medical Association, January 1944.

"Master Keys to Anatomy: Preliminary Notes." W. Montague Cobb. Journal of the National Medical Association, May 1943.

"Studies on Oxyuriasis." Eloise B. Cram. American Journal of Diseases of Children, January 1943.

"The Effect of Various Treatment Processes on the Survival of Helminth Ova and Protozoan Cysts in Sewage." Eloise B. Cram. Sewage Works Journal, November 1943.

"The Effect of Sludge Digestion, Drying and Supplemental Treatment on Eggs of Ascaris Lumbricoides." Eloise B. Cram and Donald O. Hicks. Proceedings of the Helminthological Society of Washington, January 1944.

"Primary Atypical Pneumonia, Etiology Unknown." John H. Dingle, Theodore J. Abernethy, George F. Badger, G. John Buddingh, A. E. Feller, Alexander D. Langmuir, James M. Ruegsegger and W. Barry Wood, Jr. American Journal of Hygiene, January, March and May 1944.

"Treatment of Burns—Symposium." Hans May. American Journal of Surgery, January 1944.

"Cutaneous Reactions Due to the Body Louse (Pediculus Humanus)." Samuel M. Peck, Willard H. Wright and James Quincy Gant, Jr. Journal of the American Medical Association, November 27, 1943.

"The Influence of Cholesterol and Certain Vitamins on the Growth of Endamoeba Histolytica with a Single Species of Bacteria." Charles W. Rees, John Bozicevich, Lucy V. Reardon and Floyd S. Daft. American Journal of Tropical Medicine, May 1944.

"Medical Care of Migratory Agricultural Workers." Karl L. Schaupp. California and Western Medicine, May 1944.

"Galvanic and Faradic Stimulation of the Labyrinth." E. A. Spiegel and N. P. Scala. Federation Proceedings, March 1943.

"Nasal Therapy with Special Reference to a Sulfonamide Compound." Joseph S. Stovin. Eye, Ear, Nose & Throat Monthly, May 1943.

JOSEPH DUERSON STOUT, A.B., A.M., M.D., Ph.D.

(1886–1944)

Colonel Joseph Duerson Stout, M.C., U.S.A., well known Washington neuropsychiatrist, died unexpectedly, November 6, 1944, at the 136th Station Hospital in England, of which he was Commanding Officer. He was the first member of the Medical Society of the District of Columbia to die while on active duty during this war.

Colonel Stout was born in Washington, D. C., November 20, 1886. He was a graduate of George Washington University, receiving the degrees of Bachelor of Arts in 1910, Doctor of Medicine in 1913, Master of Arts in 1914, and Doctor of Philosophy in 1915. He was also a graduate of the Army Medical School.

He served on the faculty of George Washington University School of Medicine from 1913 to 1917, and again from 1920 to 1927, during the latter period as Professor of Nervous Diseases. When the United States declared war in 1917, he enlisted as First Lieutenant in the Medical Corps of the U. S. Army and served overseas, assisting in setting up psychiatric hospitals in France. Following the war he retained an active interest in the Medical Reserve Corps and rose to the rank of Lieutenant Colonel in 1932. He was in private practice in Washington as neuropsychiatrist from 1920 until March, 1941, when he was recalled to active duty as intelligence officer at Walter Reed General Hospital. He attained the rank of Colonel in December, 1942.

Fifteen months ago Colonel Stout went overseas to take command of the 750-bed Station Hospital which he had developed at Camp Edwards, Mass. What he wrote of the personnel of his hospital staff would undoubtedly apply very aptly to himself: "They are a proud lot of men and women and have poured themselves unselfishly and without a sign of grumbling into a difficult course of training. I don't think I need to say that I am the proudest one of them all to be entrusted with their development." A recent news account relates that following the Normandy invasion, thousands of wounded from France passed through the Hospital. Although it was set up to care for 750, at one time the Hospital had as many as 1,500 patients.

Dr. Stout was elected to Active membership in the Medical Society in 1920. He was also a member of the American Medical Association and the Washington Society for Nervous and Mental Diseases.

His wife, Mrs. Agnes J. Stout, survives him, together with one daughter, Betty Jane, and three sons, Lt. Joseph D., Jr., a bomber pilot with the A.A.F.; Henry W., a Navy student at Columbia University; and Robert W., a senior at Woodrow Wilson High School. The family resides at 3530 Porter St., N. W. Survivors also include a brother, Dr. Harry Stout of Sherman, Texas, and a sister, Miss Estelle Stout of Memphis, Tenn.

(*Medical Care—continued from page 442*)

fication, must be centrally established. No fraction of the Nation should be permitted to dissipate extravagantly and inefficiently funds contributed by the whole Nation. No time could be more favorable for the institution of a national health program than the present, when the old system is disorganized and reconstruction is inevitable. The public is receptive because the exigencies of war have awakened it to the seriousness of the problem and the unsatisfactory state of the existing system. Only by a national program is there reasonable hope of rehabilitating returning medical officers and reversing the depreciation of medical standards that has taken place during the War. In the development of the program it must be recognized that distribution is not the sole or even the chief ingredient to be considered: distribution must be supported by investigation and education, for which generous provision must be made. Only by this combination can the progress of medicine be assured. Without this combination the growing gap between the potentialities and the accomplishments of medicine cannot be bridged.

If not only both great labor organizations, but the League of Women Voters and the spokesmen of the National Association of Manufacturers and the United States Chamber of Commerce promise medical care to the whole population, if both great parties have embodied in their platforms a similar promise, some change in our system of practice may be expected. There is nothing in the character of the American scene to indicate that we can escape the inexorable laws of mathematics or lift ourselves by our economic bootstraps. Private insurance can no more provide for the people at large here than it has in other countries. We shall not be the only people in the civilized world without a national program for medical care. Internationally we are tired of isolationism. Nationally physicians should abandon their professional isolationism and take the lead in devising and directing a national program. Medicine is meant for the public, not for physicians. Nevertheless, what I have said depends not upon my predictions or predilections. The principles which I have outlined are as essential to private as they are to public insurance, if quality of medical care is to be preserved and improved.

(*Medical Progress—continued from page 448*)

ment under which shall be coördinated and administered all medical and health functions of the federal government exclusive of those of the Army and Navy." Legislation to bring this about will receive the enthusiastic support of the medical profession and will end confusion, promote harmony and lay the foundation for the ultimate consummation of our objective of making "high quality medical care available to every person in the United States."

The foundation having been laid, the new agency, after coördinating all federal health activities, with the coöperation of the medical profession and all other responsible groups, can determine the necessity for and nature of federal action. This would not decrease the authority or responsibility of Congress in any way but would lessen their burden and promote the long sought for unity of purpose and execution. It would be entirely in keeping with the principles of democracy. Good citizenship means working together and working together promotes mutual understanding and good will plus a feeling on the part of the citizens that the government belongs to them.

I conclude with an old story which illustrates my idea of an American. Years ago an American, an Englishman, and a German, visiting an Oriental country, were granted an audience by the local potentate. Addressing the Englishman, he said, "I understand that you are a subject of the King of England." The Englishman bowed and replied, "Yes, your Highness, and I am very proud of it." Turning to the German, he said, "And you are a subject of the Kaiser." Clicking his heels and bowing stiffly, the German replied, "Yes, your Highness, and very proud!" Addressing the American, His Highness said, "And you are a subject of the United States of America." Whereupon the American exclaimed, "Subject, hell! I own part of the United States of America."

Let us keep it that way.

(*Challenge to Doctors—continued from page 449*)

taining men physically qualified for military service.

Great damage can be done by talking of an early end of this War. Action in the Pacific will be very violent before the conflict is over. My sympathy goes out to the medical officers who are impatient to return to civil life but indulgence in this feeling is detrimental. About five years from now when the effects of attrition will be most noticeable and the scarcity of physicians will be felt the most, the danger of epidemics will be particularly great.

Psychologically the War will have made a great difference in the fighting man who is returning home. The younger doctors now serving in the armed forces should recognize this fact and appreciate the opportunity they are receiving to learn and understand the psychology of the serviceman. This knowledge, in the years to come, will be extremely helpful in administering medical care to these veterans, who will expect adequate medical and hospital care for their dependents as well as for themselves. The responsibility for giving this care falls upon us, and I am sure we can work out sound means and methods of providing this care within the income of the individual or the family.

The Navy begins its rehabilitation program when the individual is first incapacitated by injury or illness. Throughout the various steps in rehabilitation the patient is never allowed to lose sight of the fact that the ultimate objective is to restore him to useful service, and that if he is to be discharged with a disability he must not place his sole dependence on the pension which he will receive; rather, the man is trained and assisted in finding a job and in becoming a useful citizen in the community. The greatest disaster that could happen would be the spectacle of hundreds of thousands of men turning to the Veterans Administration for every little thing.

In conclusion, let me express the hope that constructive organizations will develop the necessary information so that the United States Government can assist these responsible groups in formulating satisfactory working plans for ample distribution of medical care. Medicine should be left to the men who practice it.

(*Experiments in Medical Care—continued from page 456*)

admissions and require 25 per cent of our income. Our actual experience is depicted as follows, showing that only during the winter months are our medical admissions equal to 25 per cent of total admissions and the total cost much less than the anticipated 25 per cent of earned income. These figures should be of reassurance for any plan considering the inclusion of medical services.

MEDICAL CASES

	Admission Rate	*Average Claims Cost*	*Percentage of Total Claim Cost*
March 1944	21.5	$36.17	16
June 1944	10.7	40.91	6.2
July 1944	12.4	36.32	7.4

Payments to physicians on an individual fee-for-service basis by voluntary service plans will give rise to controversial complications until we have had much more experience than we have had to date.

At present we must think in terms of over-all income to the profession as a whole. Our over-all income is equal to $7100 per year per physician in active practice in New Jersey. This we consider an adequate over-all income as compared with any figures obtained on this subject. For this over-all income the profession must agree to work out this problem, accepting from the plan the fee-for-service which the plan can afford to pay. This fee-for-service will increase as existing defects within the insured groups are corrected. At present our total payments to physicians as compared to the total amount billed us by physicians at their regular fees is as follows, as pertains to the months of May, June and July, 1944: 78.7 per cent, 81.8 per cent and 79 per cent respectively. This probably compares favorably with the average collection rate of the profession in normal times.

I believe our experience indicates that the medical care needs of employed, self-supporting persons in New Jersey can be met on a voluntary, prepayment, insurance basis, providing the medical profession and the people are willing to attack the problem on the basis outlined in this paper.

(*Executive Board Report—continued from page 471*)

Wartime Health and Education, but you can and should read the testimony of witnesses because it will give you a better understanding of some of the problems medicine must cope with. . . .

Respectfully submitted,
Henry R. Schreiber, M.D., *Chairman*
William P. Herbst, M.D.
A. Magruder MacDonald, M.D.
James N. Greear, Jr., M.D.
Fred R. Sanderson, M.D.
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Wm. Earl Clark, M.D.
Theodore Wiprud, *Secretary*

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